

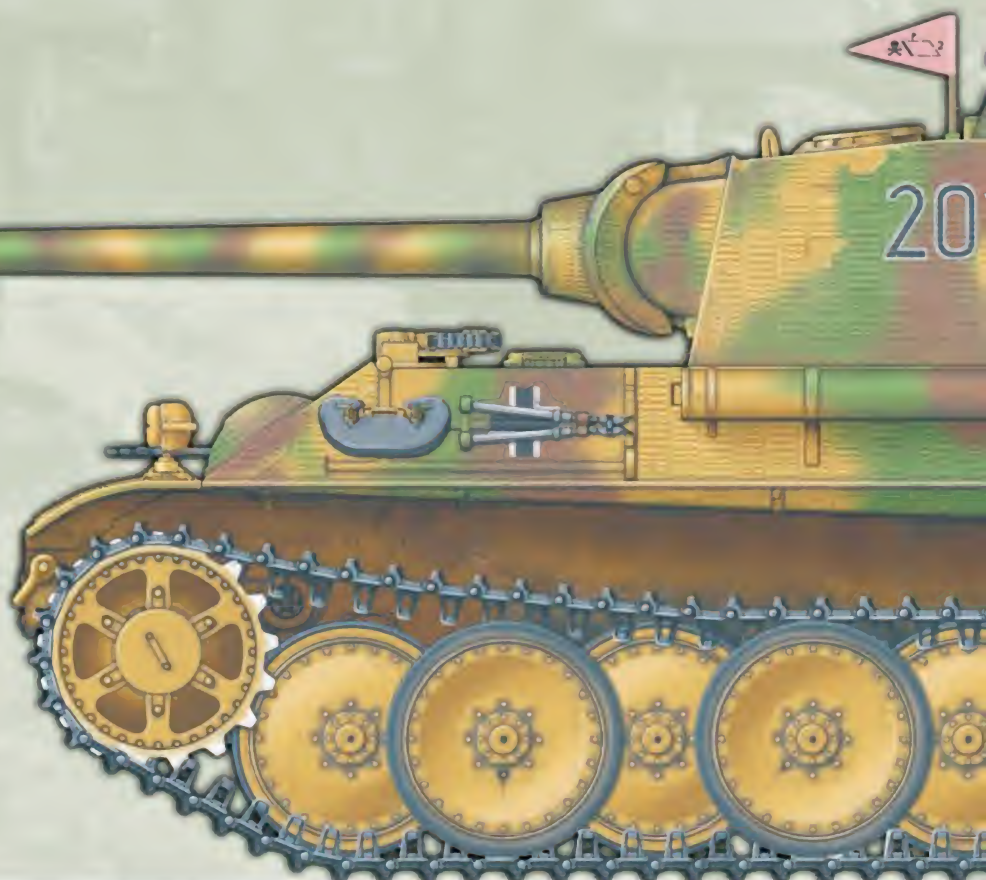


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PANTHER

PANTHER AND JAGDPANTHER
UNITS IN THE EAST
BAGRATION TO BERLIN. VOL I

WRITTEN AND ILLUSTRATED BY
DENNIS OLIVER
AND
STEPHEN ANDREW



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PUBLISHING

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COMPREHENSIVE ORGANISATIONAL AND EQUIPMENT CHARTS, UNIT HISTORY AND MAPS

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The following printed works were also consulted: Germany's Panther Tank: The Quest for Combat Supremacy. Jentz, T. Schutzenpanzer. Culver, B and Feist, U. Duel In The Mist. Haasler, T. Achtung Panzer No.4 Panther, Jagdpanther & Brummbar. Bitoh, M. (Editor). Panzertruppen 2. Jentz, T. L. (Editor). Viking Panzers: The German 5th SS Tank Regiment in the East in World War II. Klapdor, E. Armor Battles of the Waffen-SS, 1943-45. Fey, W and Henschler, H. Panther and its variants. Spielberger, W. PzKpfw. V Panther Vol 1. Trojca, W. PzKpfw. V Panther Vol 2. Trojca, W. PzKpfw. V Panther Vol 3. Trojca, W. PzKpfw. V Panther Vol 4. Trojca, W. PzKpfw. V Panther Vol 5. Trojca, W. PzKpfw. V Panther Vol 6. Trojca, W. PzKpfw. V Panther vol 7. Trojca, W. PzKpfw. V Panther vol 8. Trojca, W. Panther Variants In Color. Trojca, W. Panther Ausf A. Gawrych, W. Pz. Kpfw. V Panther. Wroblewski, R and Wrobel, A. Battle On Two Fronts 1944-45. Cockle, T. War On Two Fronts. Michulec, R. Panzertruppen 1. Jentz, T. L. (Editor). Deutsche Kampfpanzer in Farbe 1939-45. Scheibert, H. To The Last Bullet. Germany's War on 3 Fronts. Part 1. The East. Oliver, D. Endkampf. Fritz, S. The Struggle For Europe. Wilmot, C. Die Truppenkennzeichen der Verbände und Einheiten der deutschen Wehrmacht und Waffen-SS und ihre Einsätze im Zweiten Weltkrieg 1939-1945. Schmitz, P and Theis K-J. Deutsche Fahrzeugraritäten 1914-45. Hoppe, H. Germany's Tiger Tanks. Jentz, T. L. and Doyle, H. L. Tigers In Combat I. Schneider, W. Tigers In Combat II. Schneider, W. Panther. Anderson, T. Panzerwaffe 1945. Kolomyjec, M and Moszczanskij, Y. 4. Panzer-Division on the Eastern Front. Michulec, R. German Army Elite Units 1939-45. Williamson, G. The Panzer Divisions 1943-45. Battistelli, P. Panzer-Grenadier-Division Grossdeutschland und ihre Schwesterverbände. Scheibert, H. 1. Panzer Division. Reibenstahl, H. Der Kampf um Schlesien. Alfen, H. von. Battleground Prussia. Buttar, P. Danziger Bucht 1945. Kieser, E. Kveten 1945. Jakl, T. 9. Panzer-Division. Hermann, C-H. Letzter Lorbeer. Gunter, G. (Also published in English as Last Laurels). History of Panzerkorps Grossdeutschland. Volume 2. Spaeter, H. WWII German Military Symbols and Abbreviations 1943-45. Booth, t. Heeresgruppe Mitte im Osten. Hinze, R. 6. Panzer-Division. Ritgen, H. Die Gepanzerten und Motorisierten Deutsche Grossverbände 1035-1945. Stoves, R.

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Above: The Panzerkampfabzeichen IV Stufe 75 - the fourth grade of the Tank Assault Badge acknowledging participation in over seventy-five armoured engagements and the Kurland cuff title.

Following on from the second and seventh books in the Firefly Collection series - which dealt with the Sturmgeschütz or assault gun units of the German Army - this book should also be considered a companion volume to the Oliver Publishing Group's 2010 title, *To The Last Bullet*, which looked at the armoured vehicles employed by the Wehrmacht on the Eastern Front during the final months of the Second World War - from the commencement of the Red Army's Operation Bagration in the summer of 1944 to the battles for eastern Germany and Berlin in April and May 1945.

As we have mentioned previously, a single book could not hope to completely cover so vast and complex a subject, even given the limited time frame, and we were unfortunately forced to omit from our first title much of the material that had been accumulated during our research. In fact, *To The Last Bullet* merely covered the markings and camouflage of the major armoured formations and some of the organisational changes which took place during 1944 and 1945. In an attempt to present a more comprehensive picture - and as a result of the many requests we have received from our readers - this book and the subsequent volumes will concentrate on the Pzkw V Panther medium tank and the Jagdpanther tank destroyer and their deployment during the last year of the conflict in the East. In the first two volumes the Panther battalions of the numbered Panzer regiments of the Army and the units equipped with the Jagdpanther will be dealt with and in the last volume we will cover the Army's named formations, the Panzer brigades, the Panther units of the Waffen SS and of the Luftwaffe. In keeping with the format established with the Sturmgeschütz books the colour illustrations depicted in both volumes will be, for the most part, presented in chronological order without regard to branch of service.

As many readers will be aware the German Army realised from the earliest days of the Russian campaign that a stronger, more powerful tank would be required if the Red Army's T34 and KV tanks were to be met on anything like an equal footing. As early as November 1941 a committee consisting of staff officers, technical personnel with weapons designers and manufacturers was touring the Eastern Front to study the Russian designs and recommend a solution. It is almost certain that the name Panther was chosen at this time, or shortly afterwards, and this in itself was a departure from the former practice of identifying tanks by a number alone. By late November 1941 the firms of Daimler-Benz and Maschinenfabrik Augsburg-Nürnberg - or MAN - were contracted to begin work on prototypes in the 30 tonne class capable of accommodating a turret that was already under development by Rheinmetall-Borsig which would mount that company's 7.5cm L/70 gun. A number of prototype designs were ready by early May and although Hitler favoured the Daimler-Benz design the Army chose the MAN vehicle mainly due to the fear of German troops mistaking the Daimler-Benz Panther for a T34, so similar was it to the Russian tank. Concerned however that the new tank may not fulfil its intended role against future Soviet designs the

Army stipulated that the frontal armour be increased from 60 to 80 millimetres with Hitler suggesting in June 1942 that the glacis be increased further to 100 millimetres. At that time experiments were underway to increase the armour of the Pzkw III and Pzkw IV tanks by simply bolting extra plates to the vehicle and problems encountered here with the added weight convinced the Army that a redesign of the Panther, rather than an ad-hoc solution, was called for. In August 1942 MAN produced two new prototypes which were designated V1 and V2 and the latter, after testing and some modification, would be accepted as the production design. Somewhat confusingly the first tanks were named Panzerkampfwagen V Panther Ausführung A - or model A - the designation only changing to Ausführung D in January 1943 with the subsequent model adopting the Ausführung A designation. Although the Wehrmacht now had a tank that combined a potent gun with the concept of sloped armour, the hasty design and testing phase would however ensure that these early vehicles were plagued by technical problems, mainly caused by the increase in weight from the original specification. Notwithstanding the improvements and modifications made during the production of the model A and later model G, many of these difficulties were never completely eradicated.

On 14 June 1943 the Oberkommando des Heeres, or OKH, ordered that each Panzer battalion fighting in the east would be furnished with ninety-six tanks and further that the majority of Panzer divisions would receive a battalion of the new Panther tanks which were at that time still undergoing trials in Germany. Orders for the uniform reorganisation of the Panzer divisions were issued on 24 September 1943 stipulating that the Panzer regiment's first battalion would be equipped with Panthers organised into four companies each (see note 1 on page 32). Formation of the first Panther battalions began as early as the previous January when II. Abteilung of Panzer-Regiment 33 was reorganised and renamed Panzer-Abteilung 51. In the following month I. Abteilung of Panzer-Regiment 15 was renamed Panzer-Abteilung 52 and began its conversion to the new tank. Both these units fought during Operation Zitadelle as part of Panzer-Regiment von Lauchert and the survivors were concentrated into Panzer-Abteilung 52 - which was then renamed I. Abteilung, Panzer-Regiment 15. A new Panzer-Abteilung 51 was formed and remained in action with Panzergrenadier-Division Grossdeutschland until January 1944 when, with twelve combat ready tanks, the battalion returned to 9. Panzer-Division as II. Abteilung, Panzer-Regiment 33.

By the end of 1943, as the new tanks became available, battalions from Panzer-Regiment 1, Panzer-Regiment 2, Panzer-Regiment 23, Panzer-Regiment 31, SS-Panzer-Regiment 1 and SS-Panzer-Regiment 2 had been converted to Panthers and returned to the front. By the middle of 1944 most of the Panzer divisions had sent one of their tank battalions to Germany to be equipped and trained on the Panther although the journey back to their parent formation would often be long and circuitous, as we shall see.

.....continued on page 3



National boundaries and frontiers are shown as they were in 1944. The Protectorate of Bohemia and Moravia, which today makes up part of the Czech Republic, was administered directly by Germany as was the General Government of occupied Poland. In 1941 Yugoslavia had been broken up into several smaller states and a zone administered by Italy until the latter's surrender in September 1943 when German troops occupied the area.

THE EASTERN FRONT 1944

National boundaries and frontiers are shown as they were in 1944. The Protectorate of Bohemia and Moravia, which today makes up part of the Czech Republic, was administered directly by Germany as was the General Government of occupied Poland. In 1941 Yugoslavia had been broken up into several smaller states and a zone administered by Italy until the latter's surrender in September 1943 when German troops occupied the area.

The map illustrates the Eastern Front in 1944, showing the positions of German army groups and major cities. The map is divided into several regions, each controlled by a specific German army group:

- HEERESGRUPPE NORD**: Located in the north, covering Estonia, Latvia, and Lithuania. It includes the 16. Armee and 18. Armee.
- HEERESGRUPPE MITTE**: Located in the center, covering Poland, Czechoslovakia, and Hungary. It includes the 3. Panzerarmee, 4. Armee, 2. Armee, 9. Armee, 4. Panzerarmee, 17. Armee, 1. Panzerarmee, 8. Armee, 6. Armee, 3. Armee, and 2. Panzerarmee.
- HEERESGRUPPE A**: Located in the west, covering Germany and Poland. It includes the 1. Armee.
- HEERESGRUPPE SÜD**: Located in the south, covering Austria and Czechoslovakia. It includes the 8. Armee.
- HEERESGRUPPE F**: Located in the south, covering Yugoslavia and Greece. It includes the 2. Panzerarmee.

Major cities and locations marked on the map include: Rostock, Kolberg, Gdynia, Danzig, Stettin, Stargard, Marienburg, Posen, Breslau, Oppeln, Ostrava, Brno, Prague, Glogau, Dresden, Leipzig, Berlin, Frankfurt, Kustrin, Guben, Siedlce, Radom, Lublin, Chelm, Brody, Lutsk, Tarnopol, Kamenets-Podolski, Chernivisi, Edinetsi, Soroca, Mogilev-Podolski, Vinnitsa, Kiev, Zhitomir, Pinsk, Brest, Bialystock, Grodna, Rastenburg, Goldap, Heiligenbeil, Königsberg, Tilsit, Klaipeda (Memel), Siauliai, Kaunas, Vilnius, Molodetschno, Baranowitschi, Minsk, Sluzk, Bobruisk, Rogachev, Bryansk, Konotop, Romny, Lubny, Vitebsk, Nevel, Velikije Luki, Ostrow, Pskov, Velikije Luki, Narva, Luga, Tallinn, Pärnu, Tartu, Viljandi, Valka, Stende, Tukums, Jelgawa, Dobeln, Liepaja (Libau), Ventpils, Kurland, Riga, Pskov, Leningrad, Sofia, Belgrade, Sarajevo, Zagreb, Pecs, Szeged, Budapest, Bratislava (Pressburg), Nitra, Austerlitz, Opava, Brno, Prague, Glogau, Dresden, Leipzig, Berlin, Frankfurt, Kustrin, Guben, 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The commander of Panzer-Regiment 1 Oberstleutnant Ernst-Georg Philipp on the right with Feldwebel Erwin Bohlken photographed sometime after 17 March 1945 when Bohlken was awarded the Ritterkreuz. In addition to being the last soldier of the regiment to receive the Knight's Cross Feldwebel Bohlken was the only man of Panzer-Regiment 1 to be awarded the Bandenkampfabzeichen or Anti-Partisan Badge. Many contemporary accounts mention that Wehrmacht personnel were harshly treated if taken prisoner while wearing the Bandenkampfabzeichen, often shot out of hand, and that may explain its absence here. Both men survived the war, Oberstleutnant Philipp not retiring from military life until 1971.

Panzer-Regiment 1. Formed in October 1935 this regiment served with 1.Panzer-Division until the end of the war except for a brief period in March 1944 when the first battalion's Panthers were attached to Gepanzerte-Gruppe Bäke (2).

The regiment's I.Abteilung was equipped with Pzkw V Panther tanks in November 1943 and when the Soviet summer offensive began in 1944 the division was attached to 1.Panzerarmee as part of Heeresgruppe Nordukraine. Just prior to this, at the end of May, the battalion reported a total of twenty-six tanks on hand of which three were in need of repair and at the end of June a further sixteen replacements were received. Gradually withdrawing, the regiment took part in some of the fiercest battles of the war in particular the attempt to relieve units of XIII.Armeekorps trapped in the Brody pocket in Poland where in a single day, Saturday 15 July 1944, the commander of I.Abteilung, Hauptmann Friedrich Graf von Lüttichau was severely wounded and the regimental commander Oberstleutnant Wolf-Heinrich von Trotha was killed. Despite the losses the regiment made some headway in breaking through to the encircled XIII.Armeekorps, supported by the Ukrainian volunteers of 14.Waffengrenadier-Division der SS Galizien, and was only halted by a massive aerial bombardment and the failure of 8.Panzer-Division to arrive at its assembly points in time for the attack.

By September 1944, the division was fighting in the Carpathian mountains as part of XXIV.Armeekorps and during that month received ten replacement Pzkw V tanks. By the first week of October the division was in Hungary with 6.Armee attached to Heeresgruppe Süd and took part in the fighting around Debrecen some 20 kilometres from the Romanian frontier. Together with units of 23.Panzer-Division the regiment's remaining tanks managed to blunt a Soviet offensive here on 6 October and after conducting defensive operations, mounted a successful counter attack on 25 October capturing Nyiregyhaza north of Debrecen on the following day. Until the end of the year the division remained in Hungary and during December the Panzer regiment's I.Abteilung took charge of its last deliveries of Panthers, totalling twenty in all.

In January 1945 the regiment took part in Operation Konrad II, the unsuccessful attempt to recapture the city of Budapest which had been encircled by the Soviets since late December 1944. The Panther battalion was engaged in the savage fighting centred around the small village of Pettend some 40 kilometres south-west of Budapest near the north-eastern shore of Lake Balaton as part of Panzer-Kampfgruppe

Philip which also contained I.Abteilung of Panzer-Regiment 24 with a company of Panzergrenadier-Regiment 113 and a company of Panzer-Pionier-Bataillon 37. The battle group was coordinated by the staff of Panzer-Regiment 1 under Oberstleutnant Ernst Philip who had earlier commanded the regiment's first battalion during the summer of 1944. Attached to IV.SS-Panzerkorps of Heeresgruppe Süd, the regiment reported that on 15 March 1945 a total of fifty-nine Pzkw V tanks were on hand although just ten of these were combat ready.

In May 1945 the division was fighting in Austria in the area between Graz and Hartberg as part of 6.Armee of Heeresgruppe Ostmark. From there, 1.Panzer-Division moved towards Leoben on the Mur river and surrendered to the Americans.

Panzer-Regiment 2. This regiment, together with its parent formation 16.Panzer-Division, was destroyed at Stalingrad. Reformed in mid-February 1943, I.Abteilung remained with the division until the end of the war while II.Abteilung, commanded by Hauptmann Hannibal Graf von Lüttichau, was permanently detached in August 1944 and held as an Army reserve later serving in the west. Although many accounts suggest that Lüttichau's battalion was equipped with Pzkw IV tanks at least ten Panthers were issued at some time and as late as 11 March 1945 two Pzkw V tanks were relinquished to Panzer-Abteilung 2108. As a matter of interest III.Abteilung was organised as a Panzer-Sturmgeschütz battalion of three companies, each equipped with ten assault guns with a further vehicle allocated to the battalion headquarters.

On 31 May 1944, I.Abteilung reported that a total of ten Panthers were on hand and although only four were fully operational a further eight were allocated by the Heereszeugamt on the day the report was written and may not have been included in the total. During the same month the division was fighting near Deliatyn on the Prut river south-east of Lwow, capturing the village of Pechenezhyn and supporting 25th Infantry Division of the 1st Hungarian Army in the counterattack to retake Kolomea - now Kolomyja in Ukraine - some 35 kilometres to the east. In July and August the division was involved in the defensive battles for Lemberg - as Lwow was then known - with 4.Panzerarmee, including the attack aimed at the Soviet bridgehead on the Bug river between Krystinopol and Sokal.

On 1 August the division moved to the area around Krakow to attack the Russian bridgehead at Baranow and although this operation was

only partially successful it did allow a solid defensive position to be created and 16. Panzer-Division remained in the area until October on anti-Partisan operations particularly around Daleszyce and Czarna. During this time, on Saturday 23 September, the battalion received eleven Panthers with a further eight arriving on the next day and another eleven delivered on the following Wednesday. On 16 October the division was moved to Kielce, north-east of Krakow, to rest and refit. On 25 October 1944 the battalion received ten replacement tanks while serving with XXXVII. Panzerkorps of 4. Panzerarmee between Baranow and Sandomierski in present day Poland holding the line along the Soviet bridgehead that had been established at the end of July and which the regiment had attempted to reduce in August.

A report of December 1944 shows thirty-one Panthers on hand although how many of these were operational is not stated. On the first day of the new year I. Abteilung, Panzer-Regiment 2 reported that three Panzerbefehlswagen V command tanks were on hand with the battalion staff while the first to fourth companies were able to field fifty-one Panthers in total. As a matter of interest the regiment's 8. Kompanie, with fourteen PzIV L/48 tank destroyers, was also attached to I. Abteilung at that time. When the Soviets resumed offensive operations on 12 January 1945 the division had been split into several Kampfgruppen tasked with defending the area around Baranow and some elements were caught up in the Russian advance. After three days of savage fighting the Panther battalion managed to break out towards the west in the direction of Kielce some 50 kilometres west of the Vistula and by 27 January reached the Oder river at Glogau in Lower Silesia - modern Glogow in present day Poland.

On 20 February 1945 eight replacement Panthers were received and two days later the personnel and equipment that had been assembled to create Panzer-Division Jüterbog were absorbed by 16. Panzer-Division. On 3 March 1945 seven replacement Panthers arrived and on the following day I. Abteilung reported that twelve Pzkw V and four Pzkw IV tanks were ready for operations together with seven PzIV/70 (V) tank destroyers. These vehicles were distributed among the battalion's four companies, 8. Kompanie having returned to II. Abteilung. A further fifteen Panthers were in transit to the regiment although it is unclear if these were ever delivered. In addition a single Panzerbefehlswagen V of the battalion staff was considered combat ready and these were in all likelihood the last tanks the battalion received, reporting on the following day that just fifteen Pzkw V tanks

were available. The division's Panzer regiment under Oberst Ernst Collin was re-organised and now comprised two battalions with the remaining Panthers concentrated in I. Abteilung while II. Abteilung was equipped with Sturmgeschütz III assault guns. In addition both battalions had a number of Pzkw IV tanks on hand. In place of III. Abteilung, which was disbanded, the division received a Sturmgeschütz battalion.

As a Kampfgruppe consisting of the assault gun battalion and Panzergrenadier-Regiment 64 was thrown into the battle around Lauban near the modern day German-Polish border, attacking in the vicinity of Langenöls on the morning of 5 March 1945, the remainder of the division prepared to move by rail to Mährisch-Ostrau and within a week was engaged in heavy fighting south-west of the village of Schwarzwasser, north of Bautzen.

On 15 March, I. Abteilung reported that fourteen Panthers, including a number of Panzerbefehlswagen V command tanks, were on hand of which four were in need of repair. The assault gun crews suffered particularly heavy losses in the battles of early March caused largely, according to the division's history, by their inexperience and lack of training. The regiment fought in the desperate defensive battles around Dobersdorf in Austria near the present day Hungarian and Slovenian borders where on 25 March two Panthers of I. Abteilung managed to halt a Russian attack, destroying nine of the enemy's ten tanks in just three minutes. On 1 April, Easter Sunday, the same day that Oberstleutnant Ferdinand von der Planitz took over as the regimental commander, the Russians launched an attack in the division's sector of the line near Opava in Silesia - now part of the Czech Republic - only to be beaten back with the loss of half their tanks. Impressive as these local victories were, even earning the recognition and special mention of General Hans Källner the commander of XXIV. Panzerkorps, they could not conceal the fact that the Panzer regiment's strength was slowly being whittled away - the seven Panthers received a month earlier on 3 March may have been the last replacements the battalion would secure.

In mid-April the division, by now reduced to a Kampfgruppe, was attached to Obergruppenführer Herbert Otto Gille's IV. SS-Panzerkorps together with similar battle groups made up from 3. Panzer-Division and 5. SS-Panzer-Division Wiking. In the fighting around Ratibor in Upper Silesia - modern day Raciborz in southern Poland - Oberstleutnant von der Planitz was killed on the first day of the Soviet



A Panzerbefehlswagen V Panther ausf G of Stab, I. Abteilung, Panzer-Regiment 1. Note the method of application of the vehicle's number where the letter I, indicating the first battalion, is decidedly smaller than the numbers. Above: The metal oakleaf badge shown above was based on the unit insignia of 1. Panzer-Division and worn on the left side of the caps of both officers and men as a popular, if unofficial, uniform item.



Above, at right: Photographed near Lemberg - now Lwów in western Ukraine - in June or July 1944 this Panzerbefehlswagen V ausf A is the command tank of the Chef of I.Abteilung, Panzer-Regiment 1, identified by the number I01 on the turret side. Note the tubes used to hold the radio aerial extensions under the container for the gun cleaning rods, one identifying feature of these vehicles. At left: A highly decorated Oberfeldwebel wearing the second pattern black wool Panzer jacket first introduced in 1936. The earlier garment had featured a smaller collar and pointed lapels and could not be worn closed. The cut of the jacket shown here changed little throughout the war, the major difference being the discontinuation of the lapel piping in 1942. Among this man's awards are the Nahkampfspange or Close Combat Clasp, worn on the left breast, instituted on 25 November 1942 and conferred to acknowledge participation in close quarter, hand to hand battles. It was presented in three grades - either Bronze, Silver or Gold - for taking part in fifteen, twenty-five and fifty battles respectively although the criteria was often lowered for men who were incapable of returning to combat due to the severity of their wounds. On his right sleeve is the Tank Destruction Badge awarded for the single-handed destruction of an enemy tank using a hand held weapon.

offensive and replaced by Major Siegfried Gerke who had commanded the division's Panzer-Pionier-Bataillon. In an effort to shore up the front to the south of Ratibor the remaining sixteen tanks of all types were transported by rail to the area between Brno and Opava with the intention that they should counterattack towards Kralove near the Czech-Polish border. The journey south proved to be especially harrowing, enduring almost constant air strikes and artillery barrages and in a particularly heavy blow the division's popular commander, Generalleutnant Dietrich von Müller, was captured by Czech partisans and handed to the Russians.

By 4 May 1945 the division was holding a line some 24 kilometres long anchored on Wigstadtl - modern Vitkov in the Czech republic - with just six tanks and a regiment of grenadiers and although the maintenance company managed to repair a further twenty Panthers they had neither fuel nor ammunition and so, were quite useless. With the war lost, the division broke into small groups and although some men managed to surrender to the Western Allies most past into Soviet captivity.

Panzer-Regiment 4. Formed in October 1935 with two tank battalions the regiment served with 2.Panzer-Division in Poland and France and with 13.Panzer-Division during the invasion of the Soviet Union. A third battalion was formed from III.Abteilung of Panzer-Regiment 29 in May 1942 and this battalion converted to Panthers exactly one year later. On 23 September 1943 the regiment's I.Abteilung was detached and used to form schwere-Panzer-Abteilung 507 and shortly after, on 19 October, III.Abteilung was renamed I.Abteilung.

In early February 1944 the new I.Abteilung, with seventy-six Pzkw V tanks on hand, was detached from the regiment and sent to Italy operating in a semi-autonomous role ostensibly under the control of 26.Panzer-Division until 16 February 1945 when the attachment was formalised and the battalion was renamed I.Abteilung, 26.Panzer-Division. Throughout October and November 1944, II.Abteilung, which had remained in the east with 13.Panzer-Division, absorbed the personnel and equipment of Panzer-Abteilung 2110 when Panzer-Brigade 110 had been disbanded (3). The division, which had been badly depleted in the summer battles, was rebuilt with most of its battalion and company officers replaced and renamed 13.Panzer-Division Feldherrnhalle and although this may be correct it seems that the name was rarely, if ever, used (4). On 30 October 1944 the Russian

offensive to capture Budapest began and still badly under strength the division could do little to stop the Soviet advance. By 18 December all elements of the division were confined to Buda, the ancient city on the west bank of the Danube, heavily engaged in defensive operations. On 11 February, amid an attempted break out from the city by German and Hungarian units, the division's commander Generalmajor Schmidhuber was killed and two days later the city surrendered. As an effective fighting force the division had ceased to exist although elements had managed to escape and assembled near Nitra in modern day Slovakia, about 100 kilometres to the north-west of Budapest.

As early as 24 February the remnants of the division together with new replacements began reforming, receiving twenty-seven new Panthers on 11 March 1945. Less than a fortnight later on 23 March the division was renamed Panzer-Division Feldherrnhalle 2 and Panzer-Regiment 4 was renamed Panzer-Regiment Feldherrnhalle 2 (5).

Panzer-Regiment 6. Formed in 1935, the regiment's I.Abteilung was converted to Panthers on 6 August 1943. In January 1944 the battalion, with just six Pzkw V tanks on hand, was temporarily attached to 130.Panzer-Lehr-Division which was at that time being formed in France. This division was one of the first armoured formations to be organised under the freie Gliederung establishments which were intended to free combat units to perform their primary role by removing transport and supply elements from companies and battalions and concentrating them under higher authority. At the same time I.Abteilung, 130.Panzer-Lehr-Regiment was being raised and equipped with new Panther tanks but would not complete its training before early August. Somewhat confusingly an OKH order of 7 November directed that I.Abteilung, Panzer-Regiment 6 be renamed I.Abteilung, 130.Panzer-Lehr-Regiment only to be rescinded by a further order of 20 December 1944. Many modern accounts incorrectly state that the name change took place.

The first battalion of Panzer-Regiment 6 rejoined 3.Panzer-Division on the Eastern Front in December 1944 while I.Abteilung, 130.Panzer-Lehr-Regiment, made up of two companies of Panther tanks and a company of Jagdpanther tank destroyers operated as a semi-independent unit on the Western front and then in Hungary until it



Above, right: Tanks of Panzer-Regiment 2, 16. Panzer-Division photographed on the Eastern Front. Although this image was made sometime earlier than the summer of 1944, it gives a good impression of the appearance of this regiment's Panther tanks. These vehicles are from the first batch received by the regiment as evidenced by the stowage boxes welded to the hull rear and the debris guard over the mantlet of the main gun. At left, Oberfeldwebel Karl Gros. As a platoon leader with the first company of Panzer-Regiment 2 Gros was awarded, in addition to the Ritterkreuz visible here, the Deutsches Kreuz in Gold and the Panzerkampfabzeichen acknowledging his participation in over twenty-five armoured engagements.

rejoined the division on 18 February 1945. On 1 March, Panzer-Regiment 6 received ten new Panthers all of which were allocated to 3. Kompanie (6).

The division, now reduced to a Kampfgruppe, took part in Operation Frühlingserwachen in the Lake Balaton area of Hungary as part of III. Panzerkorps together with 1. Panzer-Division and 356. Infanterie-Division. When the attack began on Tuesday 6 March, I. Abteilung, Panzer-Regiment 6 had twenty-seven Pzkw V tanks on hand of which twenty-two were combat ready. Although there is no record of the battalion receiving any tanks after the delivery of 1 March mentioned above, at least one authoritative source states that on 15 March the division reported that thirty-nine Pzkw V tanks were available of which thirteen were fully operational. In April and May 1945 the division was fighting in Austria as part of Heeresgruppe Ostmark where the Panzer regiment was only able to field eight tanks of all types and a handful of assault guns.

Panzer-Regiment 9. After a lengthy formation process, which lasted from 4 December 1942 to 24 August 1943, the regiment's I. Abteilung was detached in the following September and renamed Panzer-Abteilung Norwegen while II. Abteilung was used to create Panzer-Abteilung 2103 and Panzer-Abteilung 2104 in June 1944. When the regiment's parent formation, 25. Panzer-Division, returned to the east in late summer 1944 all available armoured vehicles were concentrated in Panzerjäger-Abteilung 87 (7).

On 3 November, with the disbanding of Panzer-Brigade 104, the division absorbed Panzer-Abteilung 2104 with its remaining personnel - twenty-five Panthers and a number of Flakpanzer IV Möbelwagen. These assets would become the new I. Abteilung, Panzer-Regiment 9 and at the same time a regimental staff and two additional Pzkw IV companies were being raised and trained in Germany. When the Pzkw IV companies arrived at the front it was planned that they would be combined with the fourth and fifth companies of the Panzerjäger battalion to form II. Abteilung, Panzer-Regiment 9. The regimental staff arrived sometime after 15 December 1944 with two Panthers on hand, possibly Panzerbefehlswagen V, however the companies of II. Abteilung were attached to a Kampfgruppe built around the staff element of Panzer-Brigade 103 and employed on another sector of the front until early March 1945 when they rejoined their parent formation.

The division had in the meantime suffered heavy losses, the tank battalion being reduced to ten Panthers of which just three were operational. During March 1945 the regiment was reorganised under Oberstleutnant Eberhard Zahn and I. Abteilung was made up of a single

company of Panthers, a second company of Pzkw IV tanks and a third, mixed company of Pzkw IV tanks and PzIV/70(V) tank destroyers (8). At this time the division was attached to 4. Panzerarmee on the Oder front near Küstrin. On 11 April 1945 the division was transferred to 8. Armee in Austria and may not have had any serviceable tanks on hand.

The division, with the remnants of 11. Panzer-Division, surrendered to the Americans in May 1945. When the war ended 25. Panzer-Division was fighting as part of Panzerkorps Feldherrnhalle of Heeresgruppe Ostmark in western Czechoslovakia near the Austrian border.

Panzer-Regiment 10. Formed between 1937 and 1939 with two battalions, the regiment was attached to 8. Panzer-Division. A third battalion was formed in 1941 and the second battalion was transferred to 16. Panzer-Division in May 1942 and renamed II. Abteilung, Panzer-Regiment 2. While the division was engaged in the summer battles of 1944 the second and fourth companies of I. Abteilung, Panzer-Regiment 10 were in Germany completing their conversion to Panther tanks and would not return to the division until September. In the meantime the Panthers of I. Abteilung, Panzer-Regiment 11 were temporarily attached to the 8. Panzer-Division and many of these were lost in the battles of July and August, forming a single, weak company which with the battalion staff was transferred on 23 August to Grafenwöhr in Germany.

By the beginning of September the companies of Panzer-Regiment 10 rejoined the division which was at that time attached to 1. Panzerarmee of Heeresgruppe Nordukraine. Between 12 and 22 September 1944 the battalion received a total of forty new Pzkw V tanks and a report compiled for LIX. Armeekorps headquarters for the month of September shows that three Panzerbefehlswagen V were on hand with the Stabskompanie while 2. Kompanie and 4. Kompanie were each equipped with seventeen Panthers. The battalion's first and third companies were equipped with PzIV L/48 tank destroyers. In addition the Panzer-Werkstatt company had a number of Bergepanther recovery tanks.

The battalion took part in the fighting for the Dukla Pass on the border of Poland and Slovakia in October 1944 and at the end of the month was withdrawn from the front and stationed near Tarnow in Poland. In December the division was involved in the fighting around Stuhlweissenburg - modern day Szekesfehervar - almost exactly halfway between Budapest and the north-eastern shore of Lake Balaton and in January 1945 took part in Operation Südwind, the attempt to destroy the Russian bridgehead on the Gran river - known today as the Hron - which had developed north-west of Budapest.

In late February and early March, 8.Panzer-Division, as part of LVII.Panzerkorps, was engaged in the counterattacks around the important railroad junction of Lauban - modern Luban in Poland - as a prelude to a relief attempt of Festung Breslau which had been surrounded since 13 February 1945. Official documents confirm that on 1 March a total of seventeen Pzkw V tanks were on hand while another fifteen were in transit (9).

By 15 March this figure would be reduced to ten Panthers of which nine were operational. Attached to XXIV.Panzerkorps the division took part in the defensive battles for Schwarzwasser and Leobschutz in Upper Silesia in March and in early April 1945, 8.Panzer-Division was transferred to 1.Panzerarmee and moved to Kremsier, north-east of Brno in the present day Czech Republic. At least one source claims that the number of Panthers available to 10.Panzer-Regiment had by this time been reduced to nine operational vehicles, although this seems overly optimistic given the battalion could field just eighteen tanks at the beginning of the battles in Silesia and may have been confused with the figures for 15 March.

With the survivors of 19.Panzer-Division, the regiment's remaining tanks were formed into small battle groups with supporting infantry which could better defend the thickly wooded terrain. In the subsequent Soviet offensive that struck between Olomouc and Brno at the end of April both divisions were almost completely wiped out although a few men managed to reach the American lines in western Czechoslovakia.

Panzer-Regiment 11. Formed in 1937 and allocated to 6.Panzer-Division, the regiment's I.Abteilung began its conversion to Panther tanks in May 1943 and returned to the front in early 1944. The battalion operated as a independent unit and was temporarily attached to 8.Panzer-Division from March until August 1944.

In June 1944, when the Soviet summer offensive began, the battalion reported that eighty-three Panthers were on hand including four Bergepanther recovery tanks. The battalion was immediately involved in the fighting for Zolochiv - formerly Zloczow - followed by the ill-fated attempt to relieve units of XIII.Armeekorps trapped in the Brody pocket. Conducting a fighting retreat the battalion took part in the battles for Lwow, Ostalovychi and Busovysko in modern day Ukraine falling back on Przmysel on the San river in Poland. During the retreat a total of sixty-four of the seventy-six Panthers on hand at the end of July

were lost together with all four Bergepanther recovery tanks. The battalion's losses were so severe that by mid-August only a composite unit of the serviceable Panthers, roughly of company size, remained with the division while the battalion staff were stationed in Krakow. On 23 August 1944 an OKH order directed that all personnel, except the composite company, be transferred to Truppenübungsplatz Grafenwöhr in Germany to refit (10).

On 15 December 1944, I.Abteilung - less 4.Kompanie - was returned to 6.Panzer-Division which had been reorganised after the disastrous battles of the summer and was sent to Hungary, where elements of the division were initially combined with the available units of 8.Panzer-Division under III.Panzerkorps and the Hungarian Division Szentlászlo attached to LVII.Panzerkorps. Both these corps were subordinated to 6.Armee and were so badly under strength at the time that they were referred to as Gruppe Breith and Gruppe Kirchner respectively. The division took part in Operation Konrad II which commenced on 7 January 1945, an offensive aimed at establishing contact with the Budapest garrison which was in desperate need of supplies. On 23 January the division reported that thirty-nine Pzkw V and twelve Pzkw IV tanks were on hand. Further, a report submitted on 28 January 1944 recorded a shortfall of ten Pzkw V tanks.

On 6 March 1945 the division participated in Operation Frühlingserwachen, or Spring Awakening, an assault in the Lake Balaton area of Hungary. This would prove to be the last major German offensive of the war and was undertaken for the most part by units which had been withdrawn from the west following the failed Ardennes Offensive. Just prior to the attack commencing, on 1 March, 6.Panzer-Division reported that thirty-seven Panthers were on hand of which thirty-one were combat ready.

In April 1945 the division was fighting in Vienna under the control of II.SS.Panzerkorps. Tasked with defending the Reichsbrücke, the city's most important bridge and the only means by which retreating German units could cross the Danube, the division held out against all Russian attacks, including several air strikes and a surprise assault made by boats, until 14 April when the city was abandoned (11). Earlier on 1 April, the division reported that two Panzerbefehlswagen V were on hand with the Stabskompanie while the battalion's four companies were able to field a total of forty Panther tanks. On 7 May 1945 the division surrendered to US Army units near Brno in Czechoslovakia only to be handed over to the Soviets.

.....continued on page 24



While the various grades of the Ritterkreuz, the Knight's Cross of the Iron Cross, have been well publicised, less attention has been given to the Deutsches Kreuz. Perhaps because of the medal's overtly Nazi imagery - Hitler played a large part in the design process - it is sometimes assumed to be merely a symbol of political allegiance. The gold version was in fact a purely military award, ranked higher than the Iron Cross and below the Ritterkreuz, only conferred after repeated acts of bravery in battle. From left to right: Oberfeldwebel Adolf Sermond of Panzer-Regiment 15. Serving with the regiment from 1938, Sermond would earn in addition to the Deutsches Kreuz in Gold, the Panzer Assault Badge for 25 actions, the Wound Badge in gold and the Panzervernichtungsabzeichen in silver awarded for his singlehanded destruction of a Soviet KV-1 with a handgrenade. Hauptmann Georg Grüner. An early recipient of the Deutsches Kreuz in Gold, Hauptmann Grüner was killed during the spring of 1944 while leading the first battalion of Panzer-Regiment 2 and posthumously awarded the Oak Leaves to the Knight's Cross. Major Gerhard Fischer received the Deutsches Kreuz in Gold while serving as a Leutnant with Panzer-Regiment 201. He was later to receive the Ritterkreuz and while serving with Panzer-Regiment 23 was awarded the Panzerkampfabzeichen recognising 100 armoured engagements in December 1944.



PANZER-REGIMENT APRIL 1944

Stab und Stabskompanie eines Panzer-Regiments

Nachrichten Zug

Aufklärungs Zug

Panzer-Fliegerabwehr Zug

Pzkw V Panther

Pzkw V Panther

Pzkw V Panther

Pzkw IV

Pzkw IV

Pzkw IV

Pzkw IV

Pzkw IV

1. Gruppe

2 x FlakPz IV

2. Gruppe

As for 1. Gruppe

3. Gruppe

As for 1. Gruppe

4. Gruppe

As for 1. Gruppe

Werkstatt
Kompanie

4 x Bergepanther

Many German military terms are difficult to translate meaningfully into English and they are presented here in their original form as they appeared on the official orders.

I. Abteilung

Stabskompanie einer Panzer-Abteilung (fG)

Nachrichten und Aufklärungs Zug

3 x Pzkw V Panther

5 x Pzkw V Panther

Panzerkompanie Panther (fG)

Gruppe Führer

2 x Pzkw V Panther

1. Zug

5 x Pzkw V Panther

2. Zug

As for 1. Zug

3. Zug

As for 1. Zug

Panzerkompanie Panther (fG)

Panzerkompanie Panther (fG)

Panzerkompanie Panther (fG)

Versorgungs
Kompanie

All units of the German Army were structured according to orders issued by Oberkommando des Heeres - the high command of the Army. When organisational changes were called for these orders were accompanied by Kriegsstärkenachweisung - usually abbreviated to KstN - which were detailed tables of establishment showing the official composition of a unit in detail, listing the exact number of personnel and type of equipment from small arms to vehicles. They were issued on a regular basis and the regiment shown here reflects those dated 1 April 1944.

II. Abteilung

Stabskompanie einer Panzer-Abteilung (fG)

Nachrichten und Aufklärungs Zug

3 x Pzkw IV

5 x Pzkw IV

Panzerkompanie IV (fG)

Gruppe Führer

2 x Pzkw IV

1. Zug

5 x Pzkw IV

2. Zug

As for 1. Zug

3. Zug

As for 1. Zug

Panzerkompanie IV (fG)

Panzerkompanie IV (fG)

Panzerkompanie IV (fG)

Versorgungs
Kompanie

As mentioned in the accompanying text, the April orders were superceded by instructions issued in November 1944 which allowed for companies of seventeen, fourteen and ten tanks each. The relevant KstN now specifically referred to Panzer companies as Panther or Panzer IV and provision was made to equip companies with Panzer IV/70(A) tank destroyers. It is not known how many formations actually used the November instructions and it is almost certain that none were put into effect until 1945.

The formation of the first Panther battalion began on 9 January 1943 with the renaming of II. Abteilung of Panzer-Regiment 33 as Panzer-Abteilung 51. The battalion comprised a staff element and staff company with a Nachrichten Zug of three Pzkw V tanks and an Aufklärungs Zug equipped with five Panthers. The battalion contained three companies, each with a command troop of two Panthers and four Züge or platoons containing five tanks. The formation of Panzer-Abteilung 52, raised from I. Abteilung of Panzer-Regiment 15, quickly followed. The first two battalions together with Panzer-Regiment Stab 39 took part in Operation Zitadelle in July 1943 and the survivors were consolidated into a single battalion which was attached to Panzergrenadier-Division Grossdeutschland until the end of the year. In November 1943 a new set of organisational charts were issued in anticipation of providing each Panzer division with an organic Panther-Abteilung and the battalion structure remained essentially unchanged while the five Pzkw IV tanks, which had been allocated to the staff company of a Panzer-Regiment under the January instructions, were replaced by Panthers (1).

By December 1943 a further six battalions had been formed and sent to the Eastern Front - although a number of these were not authorised to contain a fourth platoon in each company and so fielded just seventy-six tanks and not the ninety-six allowed under the January and November instructions. This arrangement was formalised in April 1944 while the new year also saw the introduction of the frei Gliederung concept whereby transport and supply elements were removed from companies and concentrated at battalion level as Versorgungs-Kompanien (2).

The orders introduced on 1 April 1944 mainly affected the regimental headquarters which was now to contain a Nachrichten Zug of three Befehlspanzerwagen V Panther command tanks, an Aufklärungs Zug of five Pzkw IV tanks and - a completely new inclusion - a Panzer-Fliegerabwehrzug of eight Flakpanzer IV self-propelled 37mm anti-aircraft guns.

On 3 August 1944 Oberkommando des Heeres, or OKH, issued orders that all Army Panzer divisions were to be reorganised according to a standardised configuration referred to as Gliederung Panzer-Division 44. Importantly, given the extremely fluid state of the fighting in Russia, while the orders stated that formations were to begin the conversion process immediately, the OKH order included the stipulation that any reorganisation carried out by divisions was to be within "...the bounds of their available personnel and material...", a phrase which no doubt provided a rather large loop hole. The reorganisation was to be accomplished using the 1 April 1944 instructions and most relevant to our study, a Panzer-Kompanie was now to contain only seventeen tanks (3).

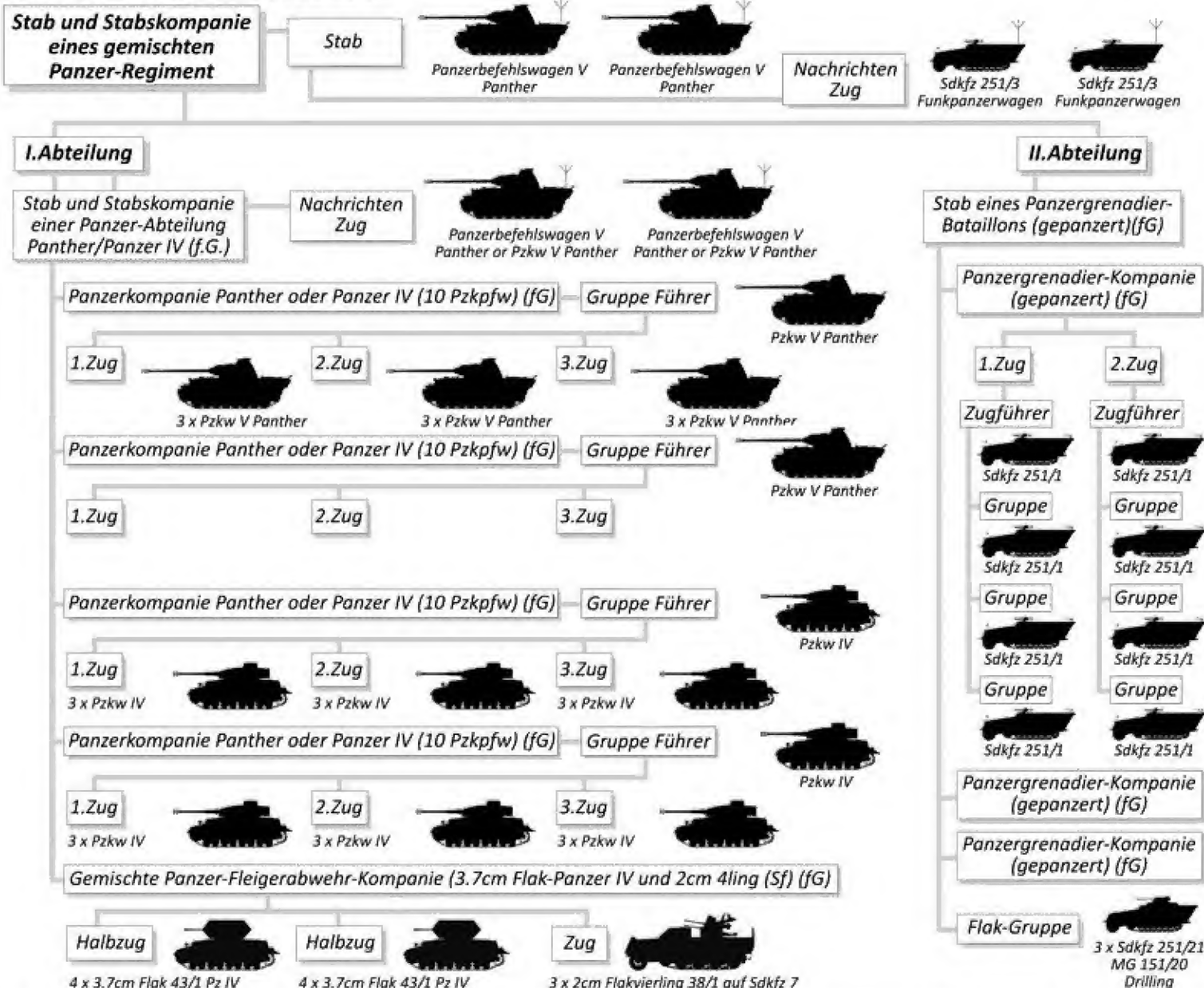
In November 1944 further instructions were issued to be used for new formations or units undergoing rebuilding and these allowed for companies to be equipped with either Pzkw IV or Pzkw V Panther tanks whereas previously separate instructions were issued for each type. The companies were to be made up of seventeen, fourteen or ten vehicles each - with the three platoons containing five, four or three tanks respectively. In addition the company command of each version fielded two tanks.

In the last weeks of the war, on 25 March 1945, OKH ordered that all Panzer and Panzergrenadier divisions - with the single exception of 232. Panzer-Division - were now to be organised in accordance with Gliederung der Panzer-Division 45. Each division would contain a single Panzer battalion made up of two companies of Pzkw V Panther and two companies of Pzkw IV tanks. The battalions were to use a new instruction which allowed for companies of three platoons of three tanks with a single tank for the company headquarters. In what was a complete departure from previous organisational practices, the Panzer-Abteilung was combined with a Panzergrenadier battalion under a regimental headquarters to form a Gemischte Panzer-Regiment - literally a mixed tank regiment (4). In addition to the twenty Panthers on hand with the companies of the Panzer-Abteilung, the battalion staff were allocated two Pzkw V tanks as was the commander of the regiment.

Those divisions unable to comply with the March 1945 order due to a lack of personnel or equipment were to be reorganised as Kampfgruppe Panzer-Division 45, the structure of which was similar to the full division with a much reduced infantry and artillery component. Perhaps indicative of the state of the Army at this time, detailed instructions in the form of Kriegsstärkenachweisung, or KstN, were not issued until 1 April 1945 - a full week after the dissemination of the original order. All formations were to report their progress by 1 May 1945 although it appears that none did.

Detailed information on which divisions were reorganised using the new orders is not available however formations known to have been restructured or formed according to the 25 March orders included 7. Panzer-Division which was ordered to reorganise as a Panzer-Division 45 on 15 April 1945 with a completion date of 1 May stipulated, 13. Panzer-Division which was rebuilt from 31 March 1945 using the Panzer-Division 45 orders, 16. Panzer-Division ordered to reorganise on 18 April as a Panzer-Division 45 by absorbing Panzer-Division Jüterbog, 17. Panzer-Division, reformed on 18 April as a Kampfgruppe Panzer-Division, 25. Panzer-Division which was ordered on 25 March to reorganise as a Panzer-Division 45, Panzer-Division Feldherrnhalle - which had actually been

PANZER-REGIMENT APRIL 1945



rebuilding since 10 March 1945 - was organised as a Panzer-Division 45 and 18. Panzergrenadier-Division ordered on 30 March to be recreated with a Gemischte Panzer-Regiment from the remnants of Panzer-Division Holstein and Panzer-Division Schlesien. To what extent the 25 March orders were actually implemented is not known with Panzer-Regiment 25 of 7. Panzer-Division for example having a total of nine tanks on hand - just five of those being considered combat ready - when the order to reform was received with only a further ten vehicles allocated before the end of the war.

Although not strictly relevant to our study, the units which served solely in the west during the last months of the war should also be mentioned. In April 1945,

2. Panzer-Division was reconfigured as a Kampfgruppe Panzer-Division after absorbing Panzer-Division Thüringen. The reorganisation of 9. Panzer-Division was somewhat unique in that the first battalion of the Panzer regiment was made up of two companies of Pzkw V Panthers with a single Pzkw IV company while the second battalion was equipped with a mixture of Sturmgeschütz III, Jagdpanzer 38 and Panzer IV/70(V) tank destroyers scavenged from the remnants of various units including Kampfgruppe 116. On 14 April 1945, 116. Panzer-Division was ordered to create a Kampfgruppe from the remaining elements of the division which was to comprise a Panzer-Kompanie with fourteen Panthers and a platoon of four Sturmstiger 38cm self-propelled guns.

1) For those readers who wish to conduct their own reading or research, the numbers and titles of the relevant Kriegsstärkenachweisung, or KStN, referred to in passing in our text are listed here in full. The formative period of 1943: 1107 Stab Panzer-Abteilung von 1 November 1941 superseded by 1151a von 1 November 1943, 1150a Stabskompanie Panzer-Abteilung Panther von 10 January 1943 modified on 1 June 1943 and replaced by 1150a von 1 November 1943 - although this was little more than a change of name, 1177 mittlere Panzer-Kompanie Panther von 10 January 1943 with a revised - yet essentially unchanged - version issued on 1 November 1943, 1185a Panzer-Werkstatt-Zug Panther von 10 January 1943. The 1944 reorganisations: 1103 Stab und Stabskompanie eines Panzer-Regiments von 1 April 1944, 1196 Panzer-Fliegerabwehrzug (3,7cm Flak 43) von 1 April 1944, 1107a(fG) Stab einer Panzer-Abteilung (frei Gliederung) von 1 April 1944, 1150(fG) Stabskompanie einer Panzer-Abteilung (frei Gliederung) von 1 April 1944, 1177(fG) Panzer-Kompanie Panther oder Panzer-Kompanie IV (frei Gliederung) von 1 April 1944, 1151(fG) Versorgungskompanie Panzer-Abteilung (frei Gliederung) von 1 April 1944 later renamed 1151(fG) Versorgungskompanie Panzer-Abteilung IV (frei Gliederung) von 1 April 1944, 1151a(fG) Versorgungskompanie Panzer-Abteilung Panther (frei Gliederung) von 1 April 1944, 1187 Panzer-Werkstatt-Kompanie Panzer-Regiment, 1103 Stab und Stabskompanie eines Panzer-Regiments von 1 November 1944, 1107 (fG) auf A Stab und Stabskompanie (frei Gliederung) einer Panzer-Abteilung IV von 1 November 1944, 1107 (fG) auf B Stab und Stabskompanie (frei Gliederung) einer Panzer-Abteilung Panther (frei Gliederung) von 1 November 1944, 1177(fG) auf A Panzer-Kompanie Panther oder Panzer-Kompanie IV (17 Pzkwpfw) (frei Gliederung) von 1 November 1944, 1177(fG) auf B Panzer-Kompanie Panther oder Panzer-Kompanie IV (14 Pzkwpfw) (frei Gliederung) von 1 November 1944, 1177a(fG) Panzer-Kompanie Panther oder Panzer-Kompanie IV (10 Pzkwpfw) (frei Gliederung) von 1 November 1944, 1103a Stab und Stabskompanie eines gemischten Panzer-Regiments von 1 April 1945, 1107(fG) Stab und Stabskompanie Panzer-Abteilung Panther oder IV (frei Gliederung) von 1 April 1945, 1177a(fG) Panzer-Kompanie Panther oder IV (mit 10 Panther)(frei Gliederung) von 1 April 1945, 1196 gemischte Panzer-Fliegerabwehrzug (3,7cm Flak 43 und 2cm Flakvierling) von 1 April 1945.

2) Although the literal translation of the term frei Gliederung could be given as free organisation, in the military context it should not be interpreted as an anything-goes approach but rather a freeing up of the administrative and manpower burden inherent in each company organising its own supply and transport services. Whatever the virtues of this change it was to a large extent forced on the Wehrmacht by a shortage of material and personnel.

3) Mid-1944 also saw the introduction of a number of independent Panzer-Brigades which will be covered in detail in a later volume.

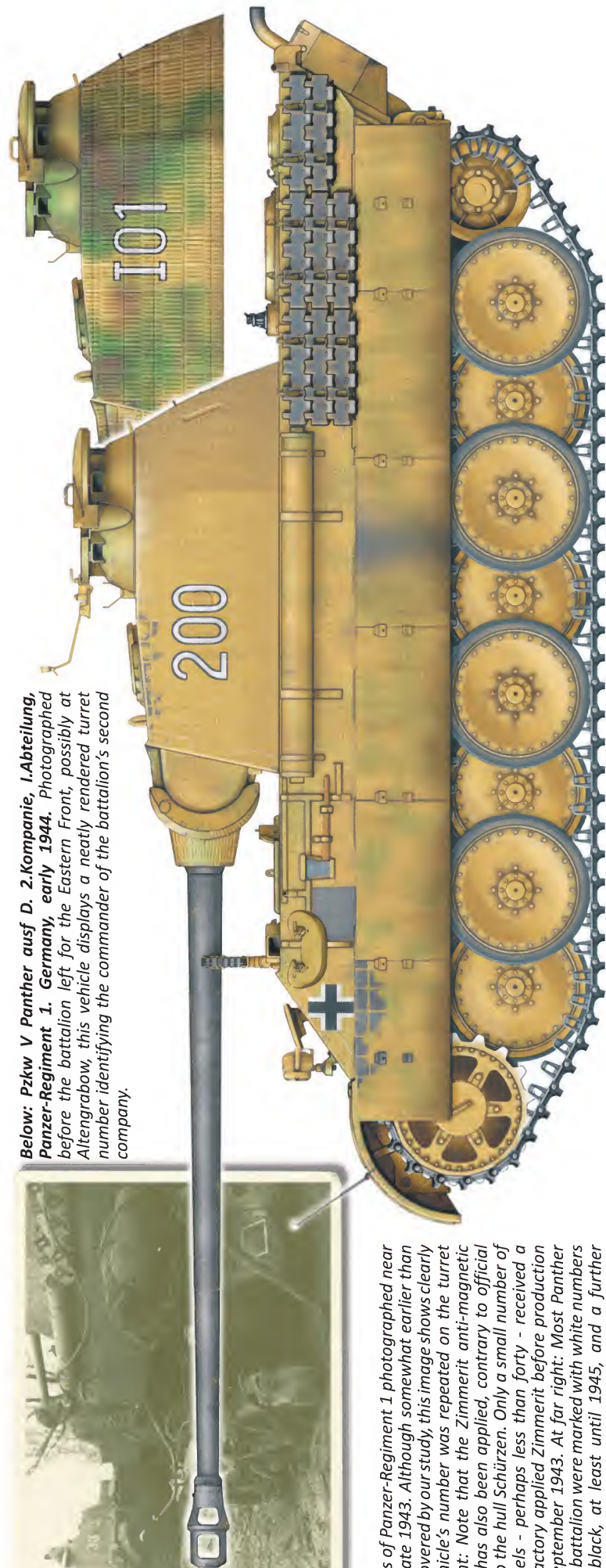
4) These should not be confused with the mixed Panzer-Sturmgeschütz battalions which were formed from mid-1943 and sometimes referred to as Gemischte Panzer-Abteilungen. For more information on these units see STUG. Assault Gun Units In The East, Volume II.

Both images on this page show Pzkw V Panther ausf G models undergoing routine maintenance. The vehicle depicted below appears to have no, or very little, disruptive camouflage and the Fahrgestellnummer or chassis number, although illegible, is just visible on the hull glacis below the machine gun.

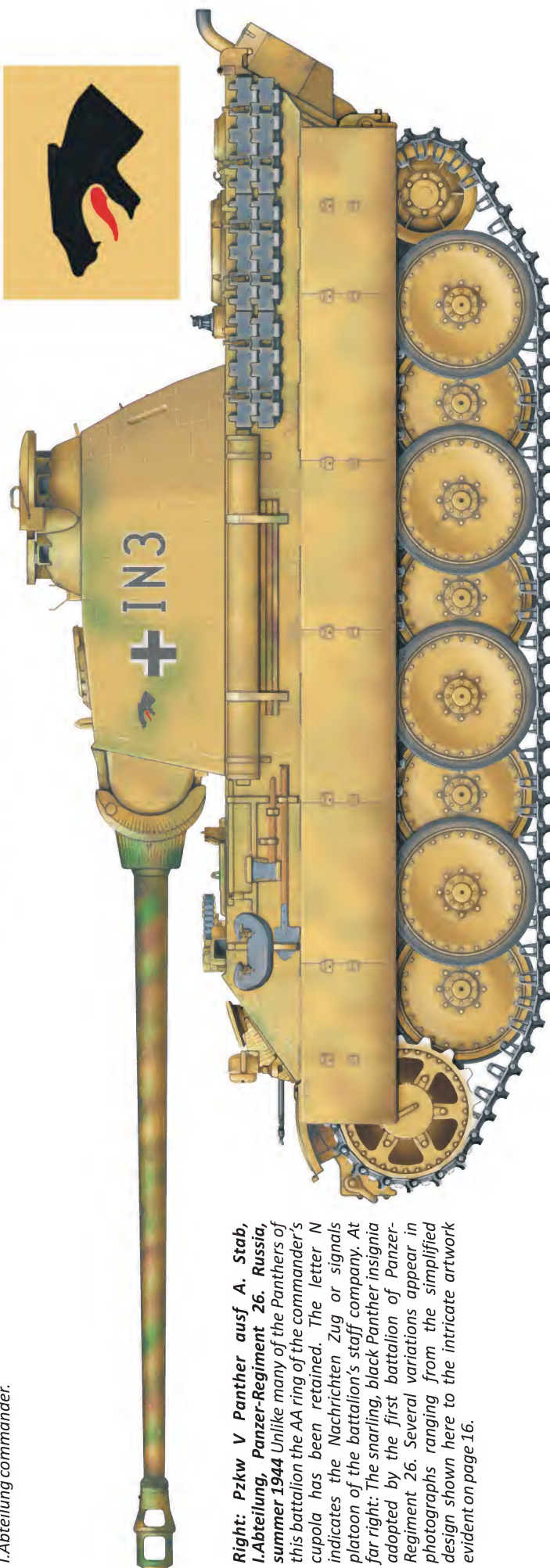




Below: Pzkw V Panther ausf D. 2.Kompanie, I.Abteilung, Panzer-Regiment 1. Germany, early 1944. Photographed before the battalion left for the Eastern Front, possibly at Altengrabow, this vehicle displays a neatly rendered turret number identifying the commander of the battalion's second company.



Above: Tanks of Panzer-Regiment 1 photographed near Zhitomir in late 1943. Although somewhat earlier than the period covered by our study, this image shows clearly that the vehicle's number was repeated on the turret rear. At right: Note that the Zimmerit anti-magnetic mine paste has also been applied, contrary to official directives, to the hull Schürzen. Only a small number of ausf D models - perhaps less than forty - received a coating of factory applied Zimmerit before production ceased in September 1943. At far right: Most Panther tanks of this battalion were marked with white numbers outlined in black, at least until 1945, and a further example is shown here, in this case the tank of the I.Abteilung commander.



Right: Pzkw V Panther ausf A. Stab, I.Abteilung, Panzer-Regiment 26. Russia, summer 1944 Unlike many of the Panthers of this battalion the AA ring of the commander's cupola has been retained. The letter N indicates the Nachrichten Zug or signals platoon of the battalion's staff company. At far right: The snarling, black Panther insignia adopted by the first battalion of Panzer-Regiment 26. Several variations appear in photographs ranging from the simplified design shown here to the intricate artwork evident on page 16.

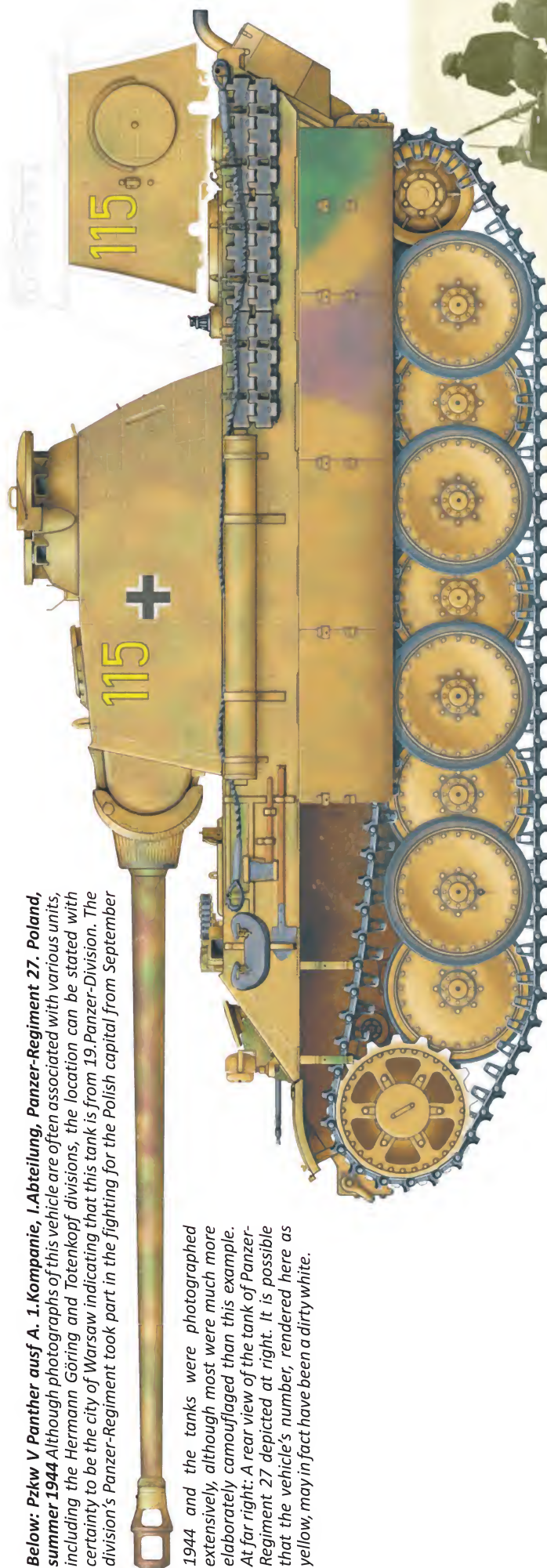


Panzerschütze, Heer Panzer battalion. Eastern Front, summer 1944

In the hot spring and summer days on the Eastern Front, lightweight clothing was an absolute necessity for Panzer crews enclosed in their tanks. Putting their tunics aside they were generally seen in shirt sleeve order as shown here. This Panzerschütze wears the M43 Panzer cloth shirt introduced in late June 1943 and made in standard Panzer dark grey cloth. It was an improvement on the previous dark grey M34 Panzer collared shirt which did not have chest pockets. In the front line this Panzerschütze has discarded his unnecessary black cotton necktie - a common practice. His headwear is the black wool M43 Panzer field cap and he has managed to acquire a pair of lightweight Heer M41 herringbone twill, reed green Panzer protective clothing trousers. The protective clothing was originally only issued to the crews of self-propelled guns but in 1942 this was extended to include tank crews. The footwear is the M37 lace-up ankle boots which had been standard issue since January 1941 with the black Panzer and field-grey uniforms of armoured vehicle crews. This soldier's basic equipment includes the army enlisted man's leather belt and a P38 pistol in its softshell holster. He is carrying a gasoline can painted in ordnance tan. The 20 litre capacity Wehrmacht-Einheitskanister, dubbed the Jerry-can by the Allies, was originally developed in the 1930's for military use and was so superior to contemporary fuel containers that it was widely copied and is still in use today. Constructed from just two pieces of stamped steel the can's distinctive indentations allowed for considerable contraction and expansion of its contents while the three handles meant that large numbers of containers could be passed down a line, from hand to hand very quickly. Further, the sturdy handles allowed two full or four empty containers to be carried by a single soldier and the integrated locking mechanism of the lid, with its built in spout, meant that small parts could not be lost. Typically one side of the can was stamped with the notation Kraftstoff for fuel or Wasser for water followed by 20 L indicating the capacity. Containers for fuel were stamped Feuergefährlich to warn of their flammable contents and both included the manufacturers logo and year of production.

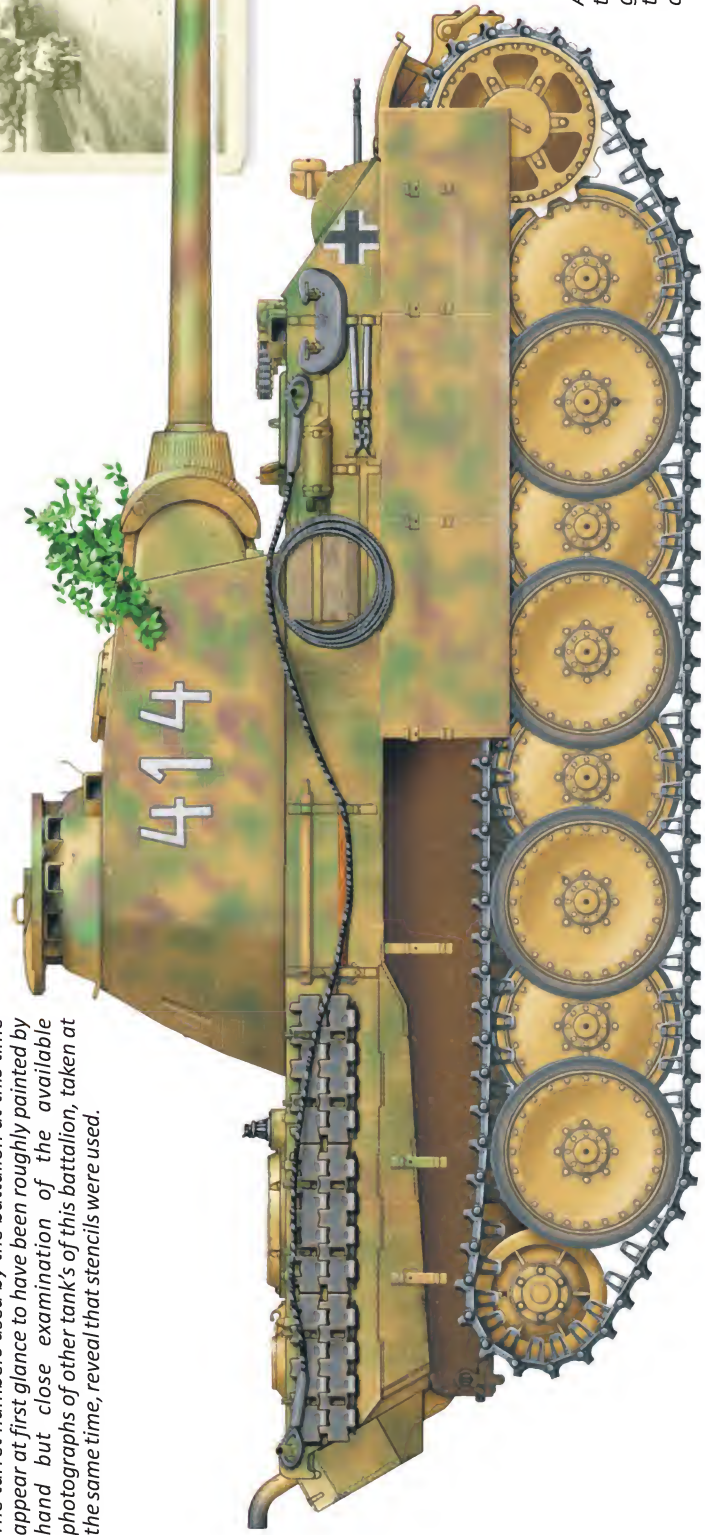


Below: Pzkw V Panther ausf A. 1.Kompanie, I.Abteilung, Panzer-Regiment 27. Poland, summer 1944 Although photographs of this vehicle are often associated with various units, including the Hermann Göring and Totenkopf divisions, the location can be stated with certainty to be the city of Warsaw indicating that this tank is from 19.Panzer-Division. The division's Panzer-Regiment took part in the fighting for the Polish capital from September



1944 and the tanks were photographed extensively, although most were much more elaborately camouflaged than this example. At far right: A rear view of the tank of Panzer-Regiment 27 depicted at right. It is possible that the vehicle's number, rendered here as yellow, may in fact have been a dirty white.

Below: Pzkw V Panther ausf A. 4.Kompanie, I.Abteilung, SS-Panzer-Regiment 3. Poland, summer 1944. Unlike many of the Army's Panther battalions those of the Waffen-SS commonly displayed their regimental or divisional unit insignia. The example shown here with the black outline seems to have become common later in the year but may possibly have been restricted to the tanks of 4.Kompanie during the summer. The turret numbers used by the battalion at this time appear at first glance to have been roughly painted by hand but close examination of the available photographs of other tank's of this battalion, taken at the same time, reveal that stencils were used.



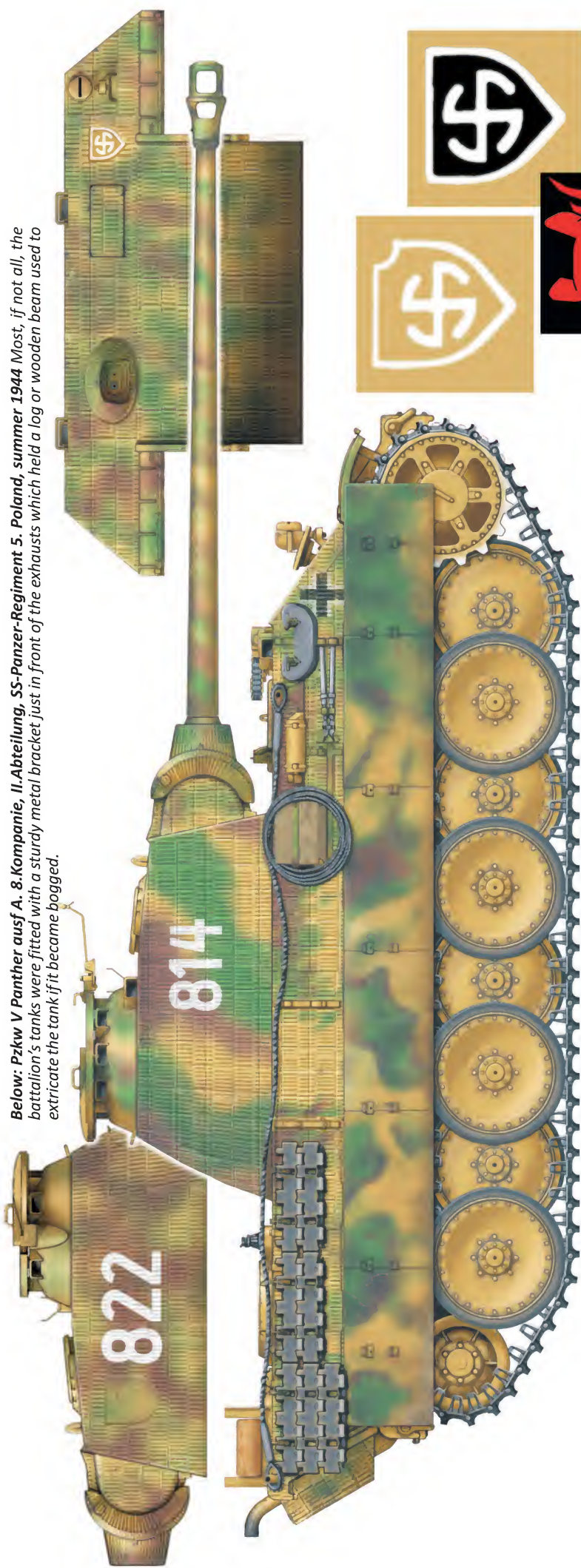
Above: The Totenkopf division's unit insignia was applied at the rear as shown in our photograph and also on the front glacis. The exact significance of the triangular marking on the turret rear is not known but may indicate a company - it is certain that the battalion staff used a hollow square.



SS-Panzerschütze, SS-Panzer-Regiment 5, 5.SS-Panzer-Division Wiking. Vistula Front, Poland. Summer 1944.

It became apparent from early in the war that the black wool Panzer uniform, when outside the vehicle, was far too conspicuous in the field. In 1941 the Waffen-SS, like their Heer counterparts, developed their own herringbone twill, reed green protective uniforms to remedy this problem and in 1943 the Waffen-SS took this a step further with the development of special camouflage clothing for its armoured vehicle crews. The final result was a two-piece camouflage Panzer drill uniform introduced in spring 1944 and printed in the pattern variously referred to today as Erbsenmuster, Pea Dot or simply SS Dot camouflage. It was cut to the same design as the SS reed green Panzer uniform and the fit was loose enough to be worn over the SS black wool uniform for better field camouflage although it could be worn on its own as a lightweight uniform during the warmer months. The SS-Panzerschütze depicted here wears this new camouflage Panzer drill uniform as regulations dictated with no insignia other than the SS national emblem on the upper sleeve and, where appropriate, sleeve rank insignia. Photographs show however that this regulation was often disregarded with shoulder rank insignia, collar tabs and even decorations sometimes worn. Under his drill uniform he wears the field grey M43 SS cloth shirt. His headwear is the popular black wool, 2nd pattern SS Panzer side cap first introduced in November 1940, its design copied from the Luftwaffe version. Supply of these M40 Panzer side caps remained sporadic until mid-1943 and up to that time many SS Panzertruppen could still be seen wearing the old style M37 black SS side cap. The footwear is the M42 SS lace-up ankle boots. In May 1944 new regulations dictated that boots were not blackened. His equipment consists of the SS enlisted man's leather belt and a P38 pistol in its softshell holster. Below: A sample of the Erbsenmuster camouflage shown in our illustration. This is in fact a plain cotton drill without the distinctive herringbone weave of the fabric mentioned above. A shoulder strap of a Hauptscharführer of SS-Panzer-Regiment 5 which features, somewhat unusually, the gold-coloured cypher more often reserved for officers.





Below: Pzkw V Panther ausf A. 8. Kompanie, II. Abteilung, SS-Panzer-Regiment 5. Poland, summer 1944. Most, if not all, the battalion's tanks were fitted with a sturdy metal bracket just in front of the exhausts which held a log or wooden beam used to extricate the tank if it became bogged.

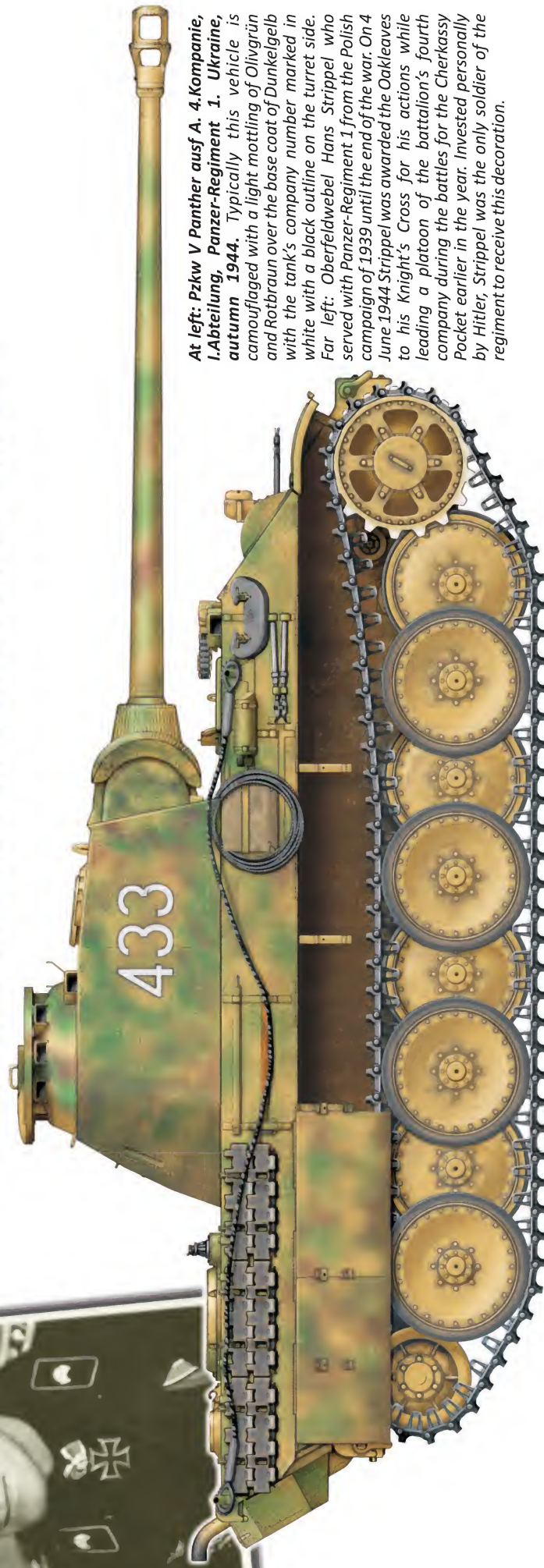
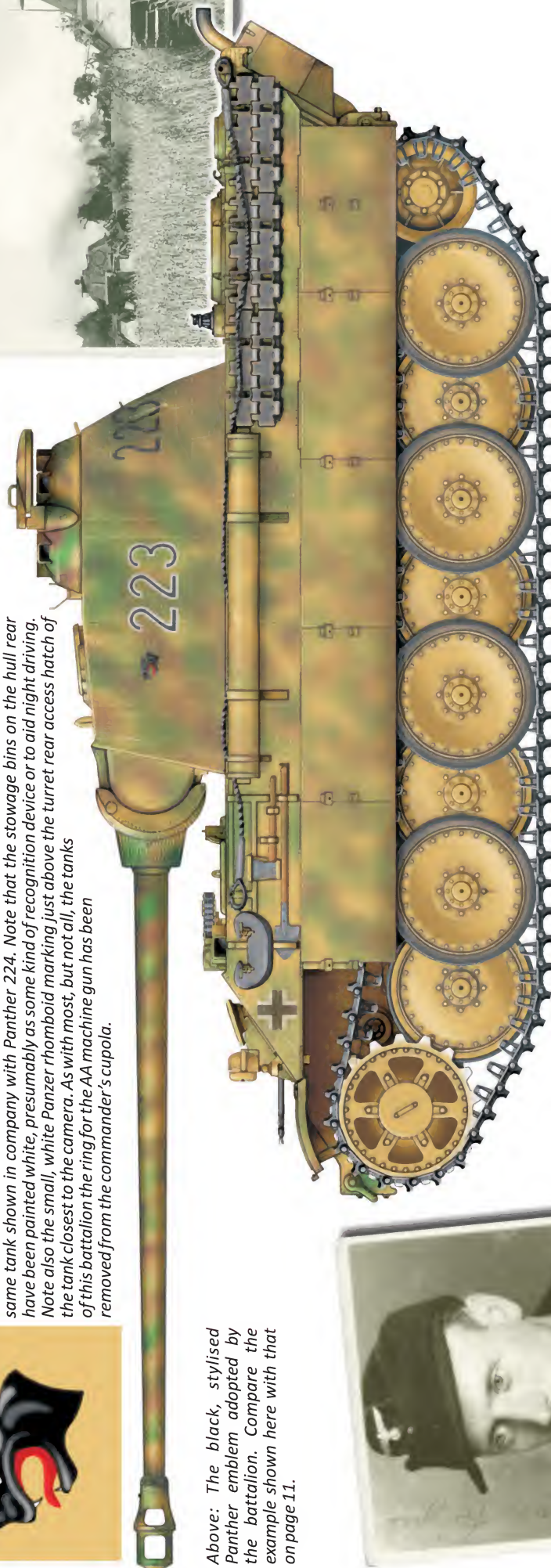
Top, right: Almost all the battalion's Panther tanks carried the Viking division's unit insignia on the hull glacis in the position shown here, usually in white outline only, although some vehicles used a dark background. Top, left: A number of Panthers had a patch of Zimmerit removed from the turret side presumably for the same purpose although photographic evidence strongly suggests that the marking was never applied. Note that although the turret numbers are rendered in the same style, the sizes vary considerably.

Right: Pzkw V Panther ausf A. 4. Kompanie, I. Abteilung, Panzer-Regiment 31. Eastern Front, summer 1944. In a manner similar to the Panthers of SS-Panzer-Regiment 5, a rectangular patch of Zimmerit has been neatly removed from the turret side, although here the regiment's unit insignia has actually been applied. At far right: An enlarged view of the unit insignia of Panzer-Regiment 31. Variations existed, however by this stage of the war the example shown here seems to have been the most common.



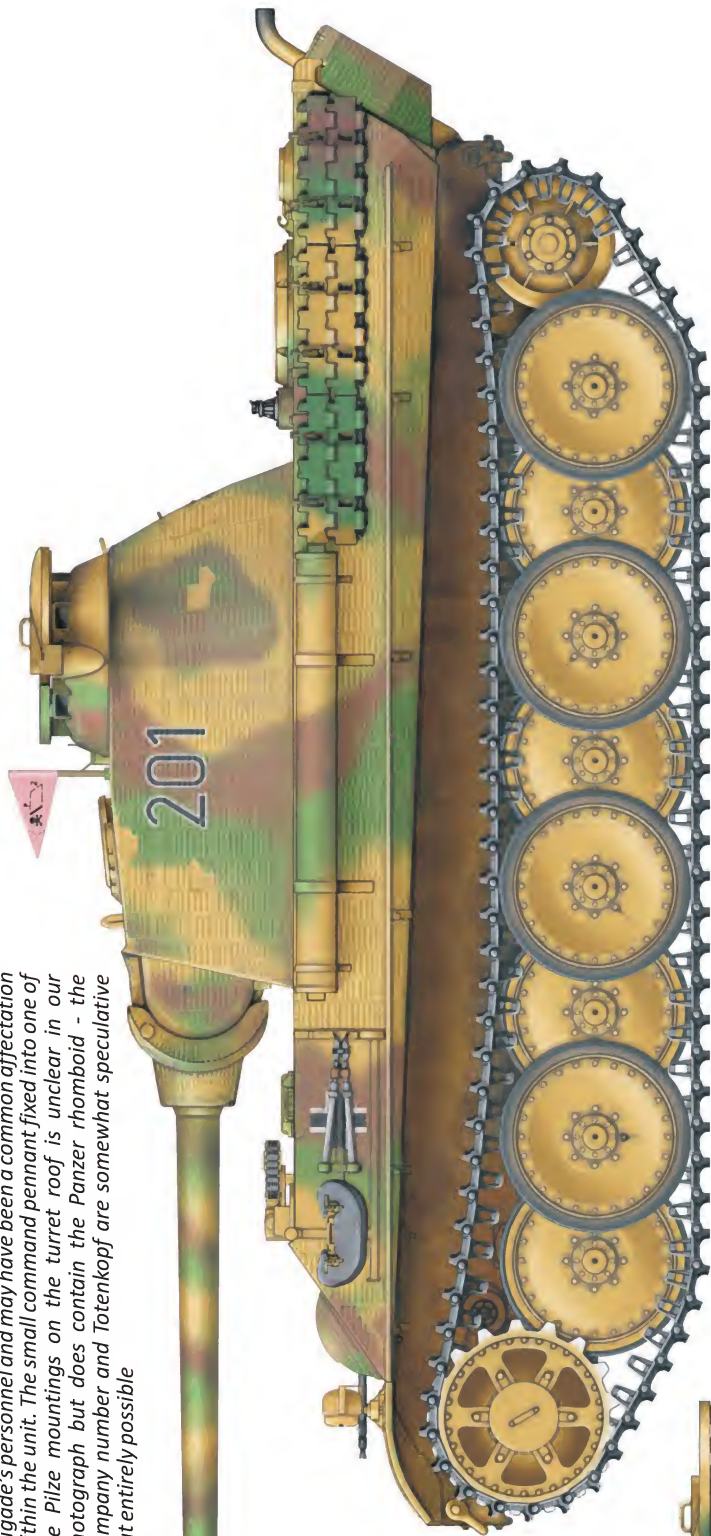
Above: The black, stylised Panther emblem adopted by the battalion. Compare the example shown here with that on page 11.

Below and at right: Pzkw V Panther ausf A. 2. Kompanie, I. Abteilung, Panzer-Regiment 26. Latvia, autumn 1944. Photographed while the battalion was taking part in Operation Cäsar, this tank clearly displays the markings which had become standard by that time. Far right: The same tank shown in company with Panther 224. Note that the stowage bins on the hull rear have been painted white, presumably as some kind of recognition device or to aid night driving. Note also the small, white Panther rhomboid marking just above the turret rear access hatch of the tank closest to the camera. As with most, but not all, the tanks of this battalion the ring for the AA machine gun has been removed from the commander's cupola.

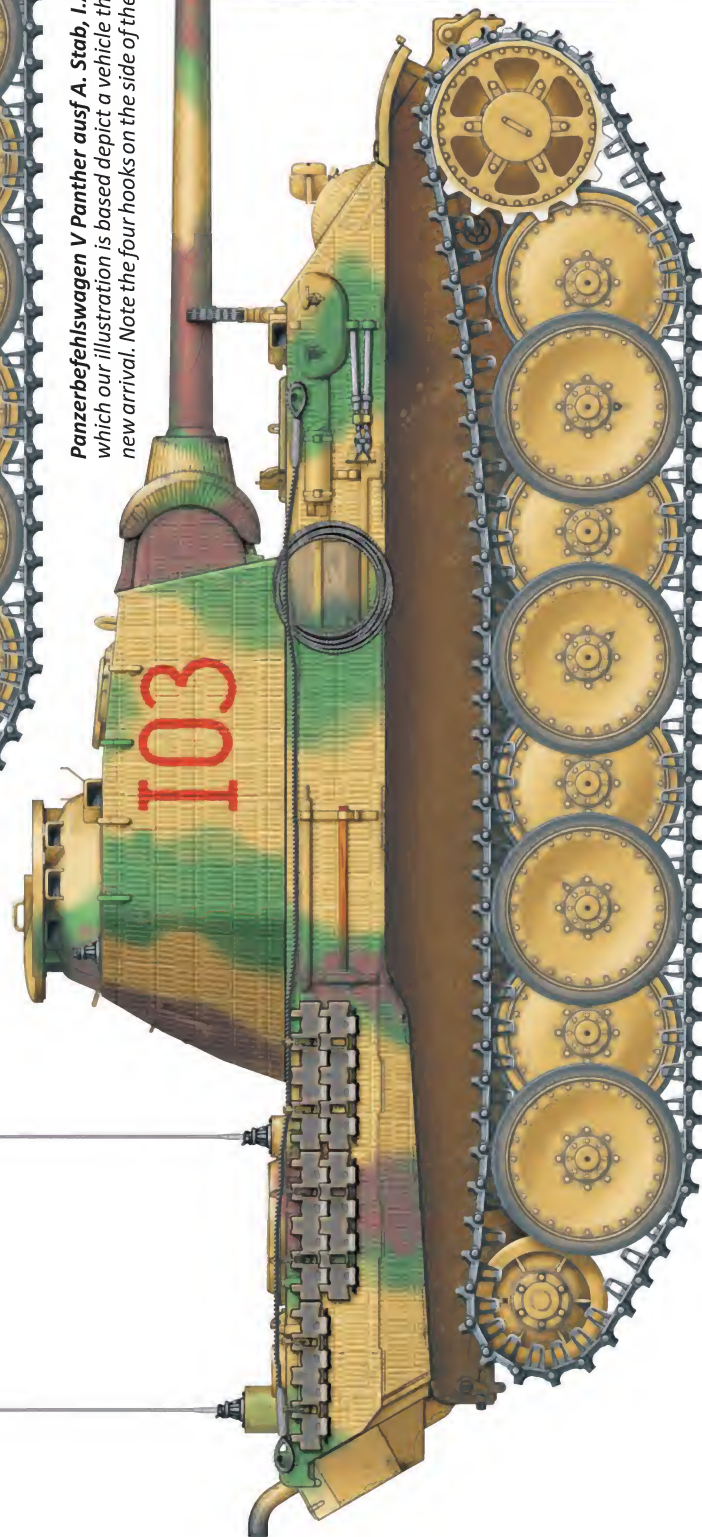


At left: Pzkw V Panther ausf A. 4. Kompanie, I. Abteilung, Panzer-Regiment 1. Ukraine, autumn 1944. Typically this vehicle is camouflaged with a light mottling of Olivgrün and Rotbraun over the base coat of Dunkelgelb with the tank's company number marked in white with a black outline on the turret side. Far left: Oberfeldwebel Hans Strippel who served with Panzer-Regiment 1 from the Polish campaign of 1939 until the end of the war. On 4 June 1944 Strippel was awarded the Oakleaves to his Knight's Cross for his actions while leading a platoon of the battalion's fourth company during the battles for the Cherkassy Pocket earlier in the year. Invested personally by Hitler, Strippel was the only soldier of the regiment to receive this decoration.

Pzkw V Panther aus G. 2. Kompanie, Panzer-Abteilung 2101, Panzer-Brigade 101, Latvia, August 1944. At this time the brigade, with SS-Panzer-Brigade Gross, was attached to Panzerverband von Strachwitz and employed in an attempt to break through to units of Heergruppe Nord which were cut off from the German units operating in the Baltic region. At left: Major Friedrich-Wilhelm Breidenbach, adjutant of Panzer-Brigade 101 photographed some time after 30 September 1944 when he was awarded the Ritterkreuz. Contrary to some accounts Breidenbach was never permanently appointed to command the brigade although he acted in the position on many occasions. Note the use of the Braunschweig style Totenkopf badge. These unofficial collar tabs are evident in a number of photographs of the brigade's personnel and may have been a common affectation within the unit. The small command pennant fixed into one of the Pilze mountings on the turret roof is unclear in our photograph but does contain the Panzer rhomboid - the company number and Totenkopf are somewhat speculative but entirely possible



Panzerbefehlswagen V Panther auf A. Stab, I. Abteilung, Panzer-Regiment 2. The series of photographs on which our illustration is based depict a vehicle that is so clean and well maintained that is almost certainly a new arrival. Note the four hooks on the side of the turret which are quite clear in our photographs.





Unterfeldwebel, Heer Panzer battalion. Eastern Front, early autumn, 1944.

The Heer second type Panzer protective uniform depicted here was officially introduced in mid-1943 although photographic evidence suggests this uniform was not actually issued until late summer at the earliest and quite possibly not until early autumn. The main characteristics of this uniform were the two large external pockets, one on the left breast and another on the upper left thigh. These uniforms became very popular with the Heer Panzertruppen and were more common in 1944. This useful, protective uniform was manufactured in two different materials - a herringbone twill type and additionally in a quality smooth, cotton duck fabric. These uniforms came in various colours, for example in the case of the waterproof cotton duck material in light grey, mouse grey or in a brownish grey. Our illustration depicts the second pattern Panzer protective jacket and trousers in a mouse grey cotton duck material. Full Panzer insignia and rank badges including shoulder strap insignia were permitted on this uniform and our illustration shows the standard Heer national emblem sewn on the lower right breast position, the distinctive Heer lozenge shaped deaths-head Panzer collar patches and the Unterfeldwebel rank shoulder straps. Underneath his jacket is the M34 dark grey Panzer collared shirt - still worn in 1944 and only replaced with the new M43 type when supplies of the earlier models had been exhausted. His headgear is the preferred M40 Panzer field cap - the M43 Panzer field cap could be a hindrance inside a tank due to its cloth peak. The footwear is M39 short-shaft marching boots. This NCO's equipment includes the army enlisted man's leather belt and a P38 pistol in its softshell holster. He carries a pair of Dfh.b headphones described in some detail on page 27. Below: The shoulder straps of a Feldwebel of one of the armoured units entitled to wear the a Feldherrnhalle Kampfrunen at left and an Oberleutnant of Panzer-Regiment Grossdeutschland.

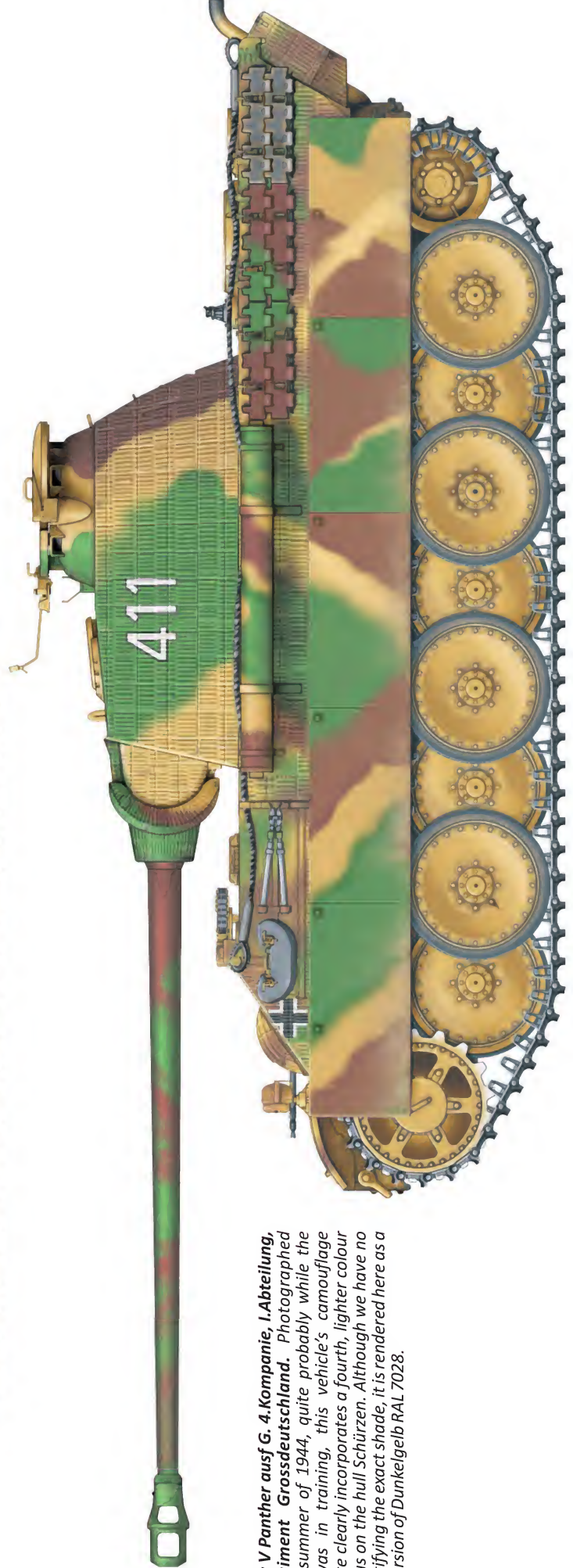
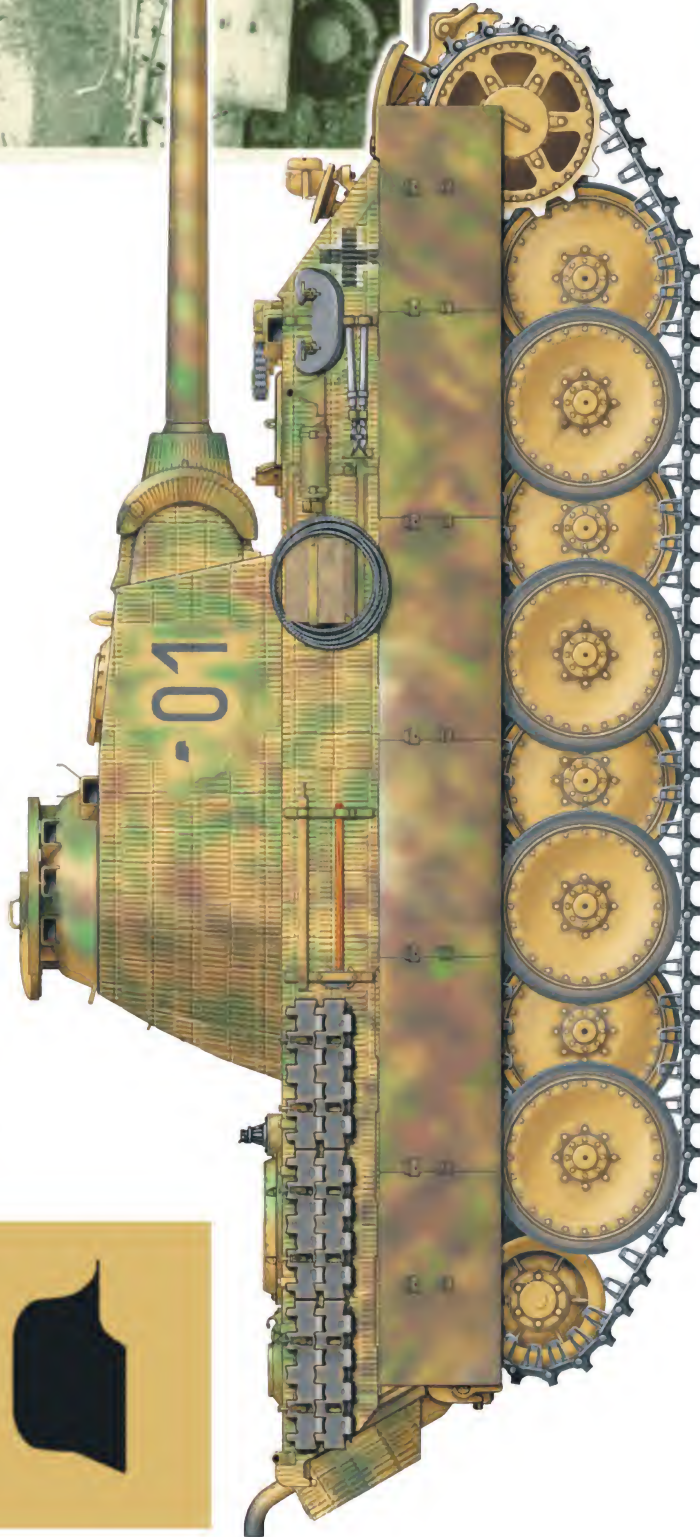




Below: Pzkw V Panther ausf A. Stab, I.Abteilung, Panzer-Regiment Grossdeutschland. This tank was the personal vehicle of Oberst Wilhelm 'Willy' Langkeit who had commanded the regiment since March 1943.



Note that a portion of the Zimmerit coating on the tank's turret has been flattened, not removed, to accommodate the division's unit insignia and the tank's number - the latter undergoing at least one change as shown here in our photograph. As Generalmajor Karl Lorenz - seen in the foreground - was appointed to command the division on 1 September 1944, and Langkeit - standing in the turret - was seriously wounded on 15 October, it seems likely that 01 was the earlier number changed at some later date to simply, 0.



Right: Pzkw V Panther ausf G. 4.Kompanie, I.Abteilung, Panzer-Regiment Grossdeutschland. Photographed during the summer of 1944, quite probably while the battalion was in training, this vehicle's camouflage scheme quite clearly incorporates a fourth, lighter colour most obvious on the hull Schürzen. Although we have no way of identifying the exact shade, it is rendered here as a lightened version of Dunkelgelb RAL 7028.

SS-Oberscharführer, 3.SS-Panzer-Division Totenkopf. Modlin, Poland. Autumn 1944

Panzertruppen utilised every type of uniform clothing and this trend only increased later in the war due to shortages and the Wehrmacht's precarious supply system. Generally few crewmen dressed alike in the front line, with little regard to uniformity, resulting in a bewildering display of clothing amongst Panzer crew members. This Waffen-SS Panzer NCO demonstrates this look.

He wears an NCO SS visor cap. His uniform consists of an old herringbone twill, reed green M41 SS Panzer protective jacket, and in this case he has added full SS and rank insignia - apart from the cuff title which was strictly forbidden on drill type uniforms. Also attached to this jacket is the ribbon of the Iron Cross, 2nd Class. With the colder climate arriving he is now wearing his black wool SS panzer uniform. For extra warmth he is wearing an M42 high turtle neck sweater, these were popular with Panzer crews in the winter months. His footwear is the standard issue M42 SS lace-up ankle boots. This senior NCO's equipment includes the SS enlisted man's leather belt and a P38 pistol in its hardshell holster. He carries a pair of 10x50 field binoculars. Below: The Totenkopf cuff title worn by members of the division including SS-Panzer-Regiment 3. The example shown here is woven in light-grey on a black background and was intended to be worn by NCO's and other ranks. The cuff titles of officers were often privately purchased and woven in aluminium or silver bullion wire. The collar patch at the left is a simple machine-embroidered version for other ranks while that at right is the earlier officer's model - note the Totenkopf is facing forward.



Below, right: Pzkw V Panther ausf A. 1.Kompanie, I.Abtteilung, Panzer-Regiment 35. The Panthers of this battalion were fitted with either a solid log or wooden beam, carried on the hull side as shown here, used to rescue bogged vehicles from the marshy terrain of central Poland. To facilitate this the container for the gun cleaning rods was moved to the rear hull. To protect the aperture of the main gun from rain and dirt a metal cover was welded in place. At right: A 2.Kompanie Pzkw V ausfG tank showing the vehicle's number on the turret rear.



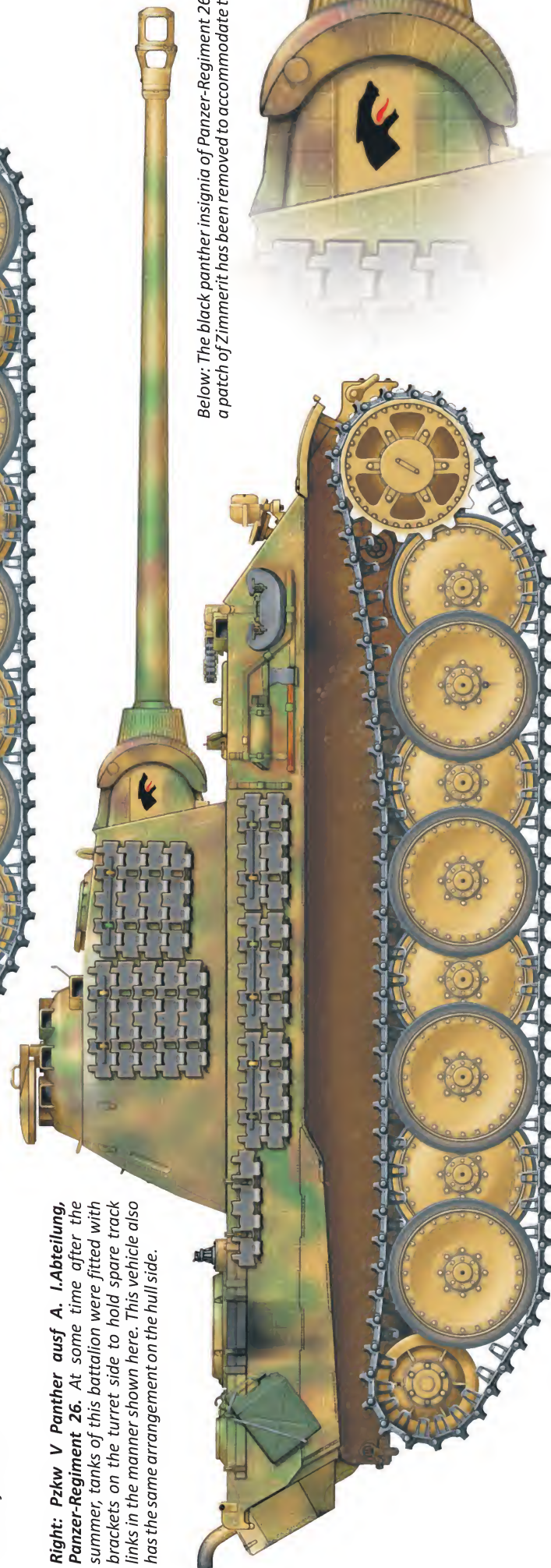
Above: A further example of the markings carried by the Panther tanks of Panzer-Regiment 35. Note that although the tank's number is placed centrally on the turret side, the numbers are slightly, but noticeably, smaller than those seen on the 1.Kompanie vehicle at right.



Above: The unit insignia of 4.Panzer-Division, the parent formation of Panzer-Regiment 35. There is no evidence that this was used by the Panthers of I.Abtteilung and it is included here merely as a matter of interest.

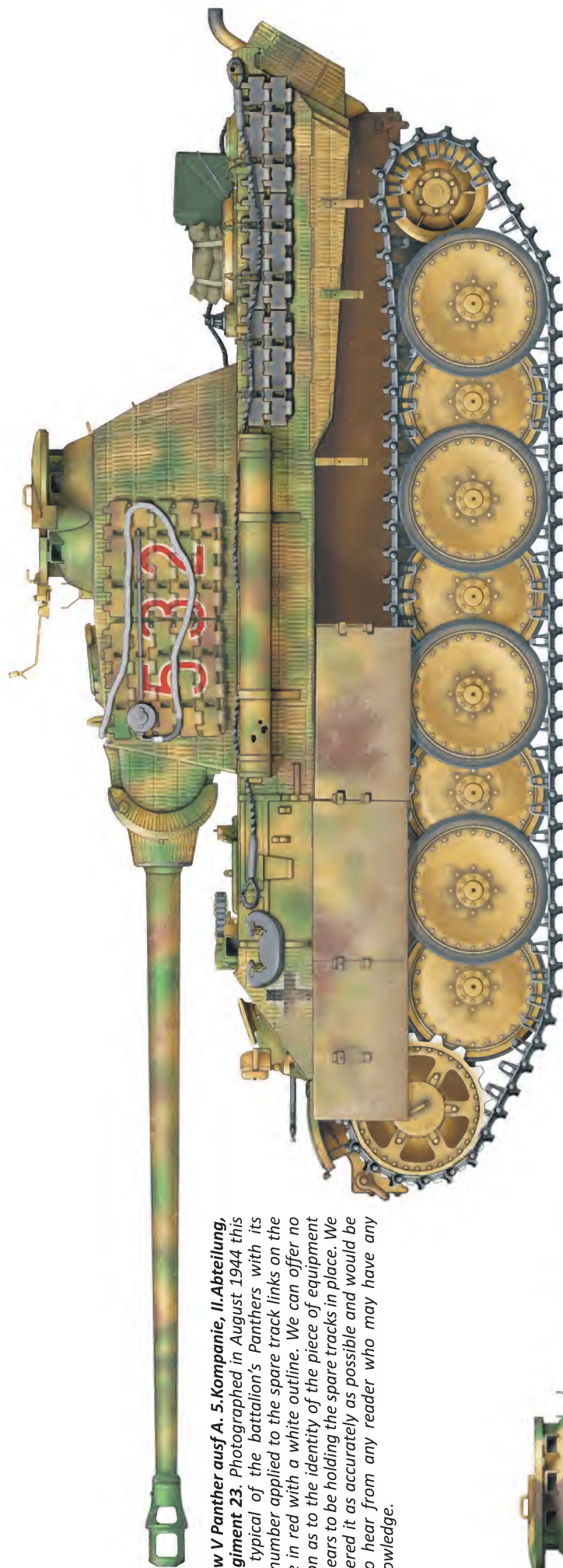


Right: Pzkw V Panther ausf A. I.Abtteilung, Panzer-Regiment 26. At some time after the summer, tanks of this battalion were fitted with brackets on the turret side to hold spare track links in the manner shown here. This vehicle also has the same arrangement on the hull side.



Below: The black panther insignia of Panzer-Regiment 26. Note that a patch of Zimmerit has been removed to accommodate the badge.





Right: Pzkw V Panther ausf A. 5. Kompanie, II. Abteilung, Panzer-Regiment 23. Photographed in August 1944 this vehicle is typical of the battalion's Panthers with its company number applied to the spare track links on the turret side in red with a white outline. We can offer no clarification as to the identity of the piece of equipment which appears to be holding the spare tracks in place. We have rendered it as accurately as possible and would be grateful to hear from any reader who may have any further knowledge.



Below: Pzkw V Panther ausf G. Panzer-Regiment 11. Poland, summer 1944. Although a positive identification of the unit to which this vehicle belongs is not possible it is known that Panzer-Regiment 11 used numbers in the 900 series for the tanks of the regimental headquarters in order to deter or confuse the enemy. It has also been suggested that this system was extended to the staff and staff company of I. Abteilung. In any case, there were no Panther battalions operating in the East during 1944 with nine companies. At far right is shown the turret of a Panther of Panzer-Regiment 11 carrying the divisional unit insignia of 6. Panzer-Division. The photograph on which this illustration is based only shows the forward quarter of the turret side and it is not known if the style of numbering was maintained.



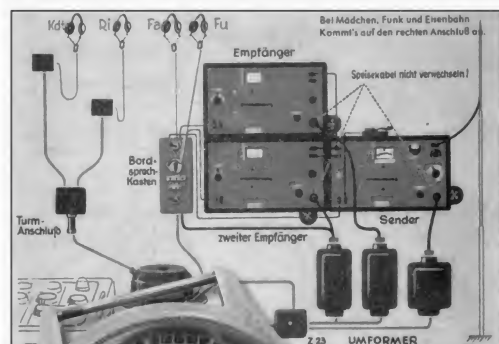
Above: The unit insignia of 6. Panzer-Division, the parent formation of Panzer-Regiment 11. This badge and its placement on the turret side was probably adopted when the battalion finally rejoined the division in December 1944.





THE PANTHER-FIBEL

Introduced in mid-1944 the Panther-Fibel, or Panther primer, was designed to appeal to young soldiers through its use of often irreverent and sometimes risqué humour. Further, the majority of the text was presented in rhyme which was thought to aid retention. The book itself was quite large at over 100 pages with a hardbound cover and many have survived to the present day. The page shown above depicts a Panzer crewman contemplating the wondrous gift he has received from the Saints and angels - Saint Barbara being the patron saint of gunners - and is extolled to "Learn with Pleasure!"



Above: Sample pages from the Panther-Fibel. Despite the comical tone imparted by many of the illustrations and much of the text, the deadly serious messages that the manual was intended to hammer home were never far away. Here, maintenance of the tank's tracks are likened to the care a soldier needed to show to his boots, without which he could not march to battle. Similarly the engine's cooling system is compared to the benefit of adequate lubrication for a night on the town. In contrast the lessons relating directly to survival in combat could be quite sombre as in the depiction of the tank's radio system and the technical data for the Soviet SU-152 and KV-85.



The personnel of 4.Kompanie had been detached from Panzer-Regiment 11 on 29 July 1944 and leaving their tanks in Russia were transferred to Germany, first to Kaltenbrunn and then to Truppenübungsplatz Grafenwöhr. Here they learnt that they would be operating Panther tanks disguised as US M10 tank destroyers as part of Panzer-Brigade 150 which was preparing to take part in the Ardennes Offensive. At the conclusion of the operation and after a period of leave the company was sent to Fallingb. on 27 February 1945 where they were trained on Pzkw V tanks fitted with infrared Bild Wandler night-vision equipment.

In late March the crews were sent to Berlin where they picked up their new Panthers directly from the Daimler-Benz plant at Marienfelde, each tank fully equipped with infrared sets and each platoon allocated a Sdkfz 251/20 Uhu half track. The latter were fitted with a powerful 60cm infrared searchlight which was capable of finding targets beyond the range of the sets installed in the Panthers. The company had expected to rejoin 6.Panzer-Division which was at that time near Linz in Austria but on 20 April 1945 the orders were cancelled - apparently after the tanks had been loaded onto rail cars - and the company was redirected to move to Teupitz, some 40 kilometres south of Berlin, and report to Kampfgruppe Ritter. In the following days the company fought its way through Halbe, Mittenwalde, Brusendorf and Königs-Wusterhausen along the road north towards Berlin and on 25 April the survivors were ordered to break through to Zossen, the remaining Panthers succeeding in reaching their objective by dawn the following morning. That night the remaining four, or possibly five, tanks and a single half track under Leutnant Mandt, one of the platoon commanders, managed to fight their way to Potsdam where, after picking up a number of stray armoured vehicles, they made their way to the Elbe river.

Although no mention is made in any account of the actual use of the night-fighting equipment, the care with which the last half track was disposed of by being sunk in the Plessower See might suggest that the infrared devices had not been removed from the vehicle as is often supposed.

Panzer-Regiment 21. Formed in October 1940 and attached to 20.Panzer-Division the regiment's first and second battalions were disbanded in April 1942 while the third battalion was renamed Panzer-Abteilung 21 and remained with the division.

On 28 October 1944 a new Stab, Panzer-Regiment 21 and I.Abteilung were raised from elements of the disbanded Panzer-Brigade 101. The staff of Panzer-Brigade 101 was allocated to the headquarters of Panzer-Regiment 21 while Panzer-Abteilung 2101 was renamed I.Abteilung, Panzer-Regiment 21. The personnel of the brigade's Stabskompanie were to be transferred to Panzergrenadier-Regiment 59 of 20.Panzer-Division as was the brigade's Panzergrenadier battalion. A new order of 16 November 1944 amended this to rename the new battalion as II.Abteilung, Panzer-Regiment 21 and allocated the Stabskompanie to the staff of the Panzer regiment. The three

companies of the former Panzer-Abteilung 2101 were renamed from 4, 5 and 6 to 6, 7 and 8 sometime before 1 December 1944. the division spent the last weeks of 1944 refitting at the Truppenübungsplatz Arys in East Prussia and in early 1945 was fighting in Silesia as part of 17.Armee.

On 31 January 1945 the division was engaged in the defence of Ratibor on the northern Oder Front and for the first two weeks of February was involved in the battles between the Oder and Opava rivers. The division took part in the relief of Festung Breslau in the latter part of February attacking from Zobten - modern Sobotka - and reaching the outer suburbs of the city before being driven back. On 15 March the battalion reported that only nine Panthers were on hand although just two of those were available for operations.

For the remainder of March and April the division, under the command of 17.Armee, was engaged in defensive battles in the Neisse area and around Görlitz. From 21 April 1945 the division took part in the battle for Bautzen, approximately 45 kilometres east of Dresden, as part of 4.Panzerarmee supported by elements of 21.Panzer-Division, Fallschirm-Panzer-Division 1 Hermann Göring, Fallschirm-Panzergrenadier-Division 2 Hermann Göring and Panzergrenadier-Division Brandenburg. Much has been made in post-war accounts of the seemingly strong German forces facing the Polish units here but it should be emphasised that all the divisions were not only under strength but practically worn out with much of the infantry made up of Hitlerjugend volunteers and the remnants of Volkssturm units. From the start the tanks and infantry of 20.Panzer-Division met with success overrunning a Soviet corps and driving towards Spremberg. By 24 April lead elements of the division had made contact with the German units trapped in Bautzen and in a co-ordinated attack were able to break into the town. On the division's right near Weissenburg the Brandenburg division had encircled and almost completely destroyed a Russian infantry division that had been rushed to the area to help the Poles and a counterattack on Bautzen itself was beaten off. Although any further advance was brought to a halt by an almost complete lack of fuel, the recapture of Bautzen and the relief of the town's garrison was one of the Wehrmacht's last tactical victories in the East.

The division conducted a fighting withdrawal towards Dresden until 3 May 1945 when it became clear that the situation was hopeless. Breaking up into small groups some men managed to make their way towards the south-west and west reaching the American lines, most were however handed back to the Soviets.

Panzer-Regiment 22. The regiment was formed in May 1944 by renaming Panzer-Regiment 100 and attached to 21.Panzer-Division. The division served on the Western Front - most notably in the Normandy campaign and the Ardennes Offensive - until February 1945 when it was sent to the east. The regiment's II.Abteilung had been detached in late July 1944 and transferred to Germany where it converted to Panthers. It never returned to its parent formation

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The presence of at least one Panther ausf G model dates this image to April 1944 at the earliest when the first examples of these tanks were delivered. The large round object on the rear deck of the nearest vehicle is an armoured cover which was intended to protect the aperture for the telescopic submersion equipment with which very few tanks were issued and which was dropped in August 1943, identifying this tank as a Panther ausf D. Note the unusual application of the tank's company number 200 which slants upwards.

Above: Three Panther ausf G models and a single Panther ausf A or later ausf D loaded on railway flatcars photographed during a halt. This image provides a clear view of the 24-bolt road wheels fitted to vehicles from August 1943. It is likely that these tanks are from the same unit as those shown on the previous page.



At left: The strain on the flatcar caused by the tank's weight is obvious in this photograph. Although difficult to detect in the reproduced image, this tank has a bent metal rod fixed between the two front mudguards. Below: Tanks of 8.Kompanie, SS-Panzer-Regiment 5 photographed during the summer of 1944. The history of this unit is covered in detail in the first book in this series, *Viking Summer*.





Above, left. A Pzkw V Panther ausf A of Panzer-Regiment 11 photographed sometime after 15 December 1944 when the regiment returned to its parent formation, 6. Panzer-Division. The officer sitting on the turret is Oberst Dr. Paul Stahl commander of the division's Panzergrenadier-Regiment 114. At right: Unteroffizier Hugo Wiesmann a tank gunner with 1. Kompanie, Panzer-Regiment 11. At the time that Unteroffizier Wiesmann was awarded the Ritterkreuz the regiment was attached to 8. Panzer-Division.

however and ended the war fighting with Panzer-Kampfgruppe XIII/von Hobe in southern Germany.

In late September 1944, I. Abteilung, Panzer-Regiment 22 received the surviving Panthers of Panzer-Brigade 112 which proved to be just enough tanks to form one weak company. A second company was raised in December 1944 utilising surplus personnel from the regiment's II. Abteilung. On 1 February 1945 the battalion reported that all four companies and the staff had been equipped with Pzkw V tanks although all were under strength (12).

On 22 March 1945, 21. Panzer-Division, together with elements of 25. Panzergrenadier-Division and Panzer-Division Schlesien, took part in the attempt to break through to the encircled garrison of Küstrin and force the Soviets out of their bridgehead on the western bank of the Oder river. Despite early successes the Russians were able to beat back the Germans within two days and take the city by the end of the month. With the Soviet breakthrough at the Seelow Heights on 19 April the division, with the other units of V. Armee, was transferred to General Theodor Busse's 9. Armee which had been cut off and effectively reduced to the Frankfurt-an-der-Oder garrison made up of the remnants of XI. SS-Panzerkorps and V. SS-Gebirgskorps. The units under Busse's command quickly found themselves surrounded in the Spreewald south of Berlin near Halbe. In the break out attempt of 28 April - which was in fact Busse's third effort - the surviving elements of 21. Panzer-Division were tasked with holding the northern edge of the pocket and in two days of fierce fighting were almost completely destroyed.

Although the last report submitted by the division of 15 April 1945 stated that thirty-one Panthers were on hand - of which twenty-five were operational - there is no way of knowing how many took part in the Halbe fighting as no records survive.

Panzer-Regiment 23. The regiment was formed on 16 August 1943 by renaming Panzer-Regiment 201 which had been attached to 23. Panzer-Division since December 1941. The second battalion of Panzer-Regiment 201 had converted to Panthers in April 1943 and on 16 August, was renamed II. Abteilung, Panzer-Regiment 23.

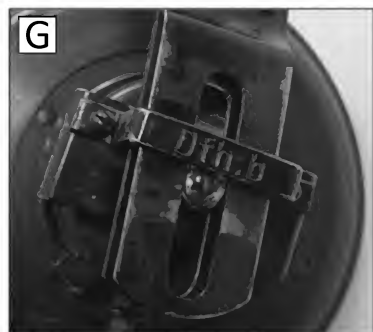
In April 1944, 23. Panzer-Division was withdrawn from the front after taking part in the battles of the previous winter and spring and was stationed near Jassy in Romania when the Soviet summer offensive began. Just prior to that, on 31 May, the division reported that fifty-two Pzkw V and ten Pzkw IV tanks were on hand although just twenty-six of the former were deemed serviceable. The division was sent to the front in August and was engaged in the defensive battles between Jaslo and Krosno in southern Poland along the line of the Jasiolka river and the second counterattack against the Sandomierz bridgehead

as part of 4. Panzerarmee which began on 11 August 1944. The fighting continued for the next three days after which both sides adopted defensive positions which lasted until the end of the month. The division was withdrawn to Klausenburg in Romania in September and subordinated to Heeresgruppe Nordukraine and in the following month was transferred to III. Panzerkorps which was fighting with 6. Armee in Hungary. During October 1944, 23. Panzer-Division was engaged in the battles around Debrecen as part of General Hermann Breith's III. Panzerkorps together with 1. Panzer-Division and 22. SS-Freiwilligen-Kavallerie-Division Maria Theresa. It was here that the division was responsible for the recapture of Nagykallo trapping three Russian corps - a rare success at this stage of the war. On 26 October the tanks of Panzer-Regiment 23 entered Nyiregyhaza, some 50 kilometres north-east of Debrecen, sealing the fate of the encircled Russians who were ordered to destroy their equipment and break out by whatever means possible. The division spent the last weeks of 1944 in the area south-west of Budapest.

During 10-12 January 1945 23. Panzer-Division was attached to I. Kavallerie-Korps and took part in Operation Konrad II, the attempt to re-establish contact with the Budapest garrison. At that time II. Abteilung was able to field thirty-three Pzkw V tanks. Within a week, on 18 January, the final part of the operation codenamed Konrad III was launched and the division was now attached to III. Panzerkorps. At the conclusion of the offensive the division reported that just two Pzkw IV and six Pzkw V tanks were available for deployment. On 6 March 1945 the division was attached to I. SS-Panzerkorps of 6. Armee and took part in Operation Frühlingserwachen or Spring Awakening, an attack intended to smash the 3rd Ukrainian Front in Hungary. On the day before the offensive commenced Panzer-Regiment 23 reported that fourteen Pzkw V and fifteen Pzkw IV tanks and eleven Sturmgeschütz III assault guns were available. The division was encircled at Stuhlweissenburg - modern Szekesfehervar - north-east of Lake Balaton, managing to escape after heavy fighting.

At the conclusion of the operation II. Abteilung stated that thirty-three Panthers were on hand although just seven of these were combat ready. Withdrawing towards the south-west the division reached Lapanj on the Mura river - Hlapičina in present day Croatia - and turned north reaching the Austrian frontier at Radkersburg. During the first week of April the remnants of the division, supported by 9. SS-Panzer-Division Hohenstaufen and the survivors of XXII. Gebirgskorps, attempted to hold the town and its bridge against a full Russian corps. By April 17 the German units in Radkersburg were facing encirclement and the town was abandoned as the bridge over the Mura was demolished at the last possible moment. The division

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From the late 1930's tank commanders were issued with headphone sets and pressure sensitive throat microphones. These were referred to respectively as *Doppelfernhörer*, abbreviated to *Dfh*, and *Kehlkopfmikrofon*, or *Kmf*. The army's standard headset, the *Dfh.a*, was found to be unsatisfactory when used by tank crews due to the amount of ambient noise created by the vehicle's engine and main gun. Experiments with higher volume levels also proved problematic and the simple expedient of attaching large rubber pads or cups to each phone was settled on. Referred to as *Dfh.b* these sets were extremely successful in reducing outside noise without eliminating it altogether and models were also developed for the *Luftwaffe* and *Kriegsmarine*. Each phone was marked with the type, year of manufacture and, until 1940, the manufacturers name. In very early models the rubber pads were a dull orange colour while later versions were black tending towards very dark grey with wear. Prior to late 1941 and the adoption of a new switch box which facilitated audio communication throughout the vehicle - the *Kasten Panzer Nummer 20* - only radio operators wore the *Dfh.b* headsets. Up until then other crew members were issued with *Dfh.d* headphones which were externally identical to the *Dfh.b* except for the markings and the length of the plugs and therefore almost impossible to identify in photographs. Early models of the throat microphone were recalled in 1938 and upgraded to newer standards and from that date models referred to as *Kmf.a* and *Kmf.b* - with two and three prong plugs respectively - were issued. The version used was dictated by the type of intercom system installed in the vehicle with earlier models accepting the *Kmf.a* connection for all crew members while after 1941 the commander and radio operator used the *Kmf.b* which allowed for more complex options such as external communication. Self-propelled artillery and assault guns, which unlike tanks were fitted with loud speakers, all used the *Kmf.b* with three-pronged connections. Development of the throat microphones culminated in the simplified *Kmf.c* model of 1944. A combination headset and throat microphone, the *Funkhaube A*, was said to have been introduced in September 1944 however we have been unable to find any photographic evidence that would verify its use in combat. It is possible that the *Funkhaube A*, as its name would imply, may have been modelled on the flying headgear issued to *Luftwaffe* personnel and inspired by the Red Army's canvas tank helmet. Above, A: Photographed on the Oder Front in April 1945 this man is wearing a pair of *Dfh.a* or *Dfh.f* headphones identified by the simplified, swivel headband which holds the phones in place. The assault gun commander in the background wears the *Dfh.b* version over what seems to be a black *Panzer* officer's side cap. B: A newly decorated Panther driver equipped with the *Dfh.b* headphones and what is probably a *Kmf.b* throat microphone. Clearly visible here is the improved headband with adjustable sliders used with these sets. C: A Panther radio operator, possibly of *Panzer-Regiment 26*, wearing the *Dfh.b* headphones in the manner favoured by many crew members when outside the vehicle, with one ear uncovered. D: A pair of *Dfh.f* headphones. These were specifically made for use with backpack radios and were identical to the *Dfh.a* sets except for the length of the plug. E: A close-up of one of the ear pieces. The type, manufacturer's logo and date are all clearly visible here. F: A *Dfh.b* set showing the rubber pad, the more complex headband and the adjustable slider. G: A close-up view of another *Dfh.b* headphone set showing the designation stamped into the bracket that holds the slider.



Above, left: An early Pzkw V Panther ausf A of I.Abteilung, Panzer-Regiment 25 possibly photographed in August 1944 just after the battalion returned to the Eastern Front. The only marking carried is the Balkenkreuz national insignia, just visible on the hull side in the original image. A pattern of disruptive camouflage can be seen on the turret side and is made up of large, irregular shapes in what are almost certainly Olivgrün and Rotbraun on the tank's Dunkelgelb base colour. At right: Leutnant Hans-Baba von Rohr, commander of the second company of Panzer-Regiment 25, photographed in late 1944. Awarded the Ritterkreuz in recognition of his bravery in the fighting for the Memel bridgehead, Leutnant von Rohr was killed on 14 February 1945 near Konitz and posthumously awarded the Oak Leaves exactly ten days later.

withdrew towards the west through Drauburg - present day Dravograd where fighting continued for a full week after the official surrender - crossing the border into southern Austria. When the war ended on 8 May most of the division surrendered to units of the British army which had entered Austria from Italy however some units had been had been scattered through Slovakia.

Panzer-Regiment 24. This regiment, along with its parent formation 24.Panzer-Division, was rebuilt in mid-1943 after being completely destroyed at Stalingrad. The regiment's III.Abteilung was converted to a Panzer-Sturmgeschütz battalion made up of two companies of Sturmgeschütz III assault guns and two companies of Pzkw IV tanks and I.Abteilung was equipped with Pzkw V Panther tanks at the same time. In May 1944, the Panther battalion was reorganised according to the new freie Gliederung structures with four Schwadronen - the regiment was a former cavalry unit - and subordinated to Panzer-Brigade 10, a training unit stationed at Truppenübungsplatz Grafenwöhr. From July 1944 the battalion was attached to 116.Panzer-Division, as that formation's Panther battalion was still in training, and in August to 2.Panzer-Division - both formations serving in the West.

In late 1944 the battalion was transferred to Truppenübungsplatz Bergen near Fallingbomel to train on Panthers equipped with infrared night-fighting equipment. The situation in the east had become so dangerous that the battalion was rushed to Hungary in early 1945 leaving all its infrared sets behind. From 17 January until the end of the month I.Abteilung, Panzer-Regiment 24 was attached to 1.Panzer-Division, except for a brief period on 25 January when the battalion's twelve operational tanks supported an attack by 3.SS-Panzer-Division Totenkopf near Pettend in Hungary north-east of Lake Balaton. By 27 January the number of serviceable tanks had dropped to five and these vehicles were used in a counterattack on the village of Vereb, south-west of Budapest. The battalion's equipment losses for January included thirteen Panther tanks and two Bergepanther recovery vehicles as complete write-offs while a total of sixty new Pzkw V tanks had been received by the end of the month. These were the last replacements I.Abteilung would receive. The battalion took part in Operation Frühlingserwachen, or Spring Awakening, which began on 6 March 1945 as part of III.Panzerkorps with thirty-two operational

tanks. Throughout March, I.Abteilung, Panzer-Regiment 24 served with 1.Panzer-Division, 3.Panzer-Division and 23.Panzer-Division and until mid-April with IV.SS-Panzerkorps. On 15 March the battalion reported that thirty-two tanks were on hand although just three of these were combat ready. From 15 April until 8 May the battalion was directly under the control of III.Panzerkorps. With the end of the war the survivors of the battalion found themselves near Liezen, south-east of Salzburg in Austria, and during the late afternoon of 9 May 1945, destroyed their last Panthers and made their way to the American lines on southern bank of the river Enns.

Panzer-Regiment 25. Formed in November 1938 and assigned to 7.Panzer-Division on 18 October 1939. The regiment's I.Abteilung began its conversion to Panthers on 15 October 1943, although the battalion was not fully operational until July 1944. On 1 August the battalion reported that a total of 36 operational Pzkw V tanks were on hand - seven with the Stabskompanie, of which three were Befehlspanzer, and three, nine, five and twelve with the first, second, third and fourth companies respectively. Additionally eleven tanks were in transit. Although badly under strength Panzer-Regiment 25 was engaged in the defensive battles around Raseiniai, some 60 kilometres north-west of Kaunas in Lithuania and on 21 August supported Panzergrenadier-Division Grossdeutschland in a counterattack towards the road and rail junction of Siauliai closer to the Latvian border. By the end of the month the third and fourth companies had not one serviceable tank while the Stabskompanie had been reduced to a single Panther.

The division spent most of September conducting defensive operations in the area between Siauliai and Kaunas and towards the end of the month took part in an assault aimed initially at Dobeles and ultimately Tuckums in Latvia west of Riga. In October the division withdrew towards the port city of Memel in East Prussia - now Klaipėda - fighting all the way and losing most of 3.Kompanie in the battles around the small town of Tryskiai. By 9 October 1944 what remained of the division had reached the Memel bridgehead where the survivors of the Panzer regiment and their remaining equipment were formed into a mixed battle group referred to as Einsatzgruppe Panzer-Regiment 25 made up of a regimental Stabskompanie with a signals and reconnaissance

platoon and Einsatzkompanie I.Abtteilung with two Pzkw IV and six Pzkw V tanks and Einsatzkompanie II.Abtteilung equipped with three Pzkw IV tanks and five Panthers. The two companies were made up from personnel of the second, third, fifth and seventh companies of the Panzer regiment. The rest of the division was ordered to be ready to move almost 100 kilometres to the south-west by ferry to Pillau - present day Baltiysk - west of Königsberg on the Vistula lagoon. During the last week of October the division began leaving Memel and from Pillau moved to the Truppenübungsplatz Arys in East Prussia near modern day Orzysz in Poland to refit.

In Memel, Einsatzgruppe Panzer-Regiment 25 continued with the defence of the city reporting that twenty-two Panthers, including a single Befehlspanzer, were on hand of which eighteen were ready for combat, together with nine Pzkw IV tanks. By Wednesday 22 November 1944, the last of the Panzer regiment's tanks and personnel began leaving Memel and by Friday evening the last elements arrived in the port of Königsberg, travelling from there by train to join the division at Arys. On 1 December the regiment reported that a total of twenty-five Panthers were on hand of which three were Befehlspanzer command tanks assigned to the regimental and first battalion headquarters while 1.Kompanie and 2.Kompanie had eight and five tanks respectively. On the same day the battalion received seventeen Panthers - of which at least five were Befehlspanzer - handed over from the disbanded Panzer-Abteilung 2102. On 16 December, 7.Panzer-Division moved by rail to Przasnysz north of Warsaw and from there, by the end of the month, west across the Vistula to the area around the small town of Badkowo - where the division acted as the operational reserve of 2.Armee.

On the first day of the new year the regiment reported that a total of five Befehlspanzer and thirty-four Panther tanks were ready for combat. On 15 January, after weeks of almost complete calm, the regiment was tasked with leading the counterattack on the Soviet bridgehead at Pultusk on the Narew river, a tributary of the Vistula. In the late afternoon the complete regiment with about eighty Pzkw IV and Pzkw V tanks and PzIV/70(A) tank destroyers moved forward and almost immediately ran into a strong Russian anti-tank position which had been concealed in the forested area to the west of the town. Both battalions suffered heavily and although exact figures are unknown the regiment's history mentions estimated losses of almost 50 per cent. All through the remainder of January 1945, 7.Panzer-Division conducted a fighting withdrawal and by the end of the month was west of Elblag on the Elbe river. Many tanks that would have been repairable, or at least

recoverable, under other circumstances were lost due to the speed of the Russian advance and the single Panther with the two Pzkw IV tanks that remained were placed under the control of Major Walter Brandes the commander of II.Abtteilung - Major von Petersdorff-Kampen, the regimental commander, having been killed in the counterattack at Deutsche-Eylau on 23 January 1945. The crews of the second, third, seventh and eighth companies who had no tanks were formed into an Alarm-Bataillon armed with rifles and machine guns. Nevertheless, by the first week of February the division, at that time subordinated to Korpsgruppe von Rappard, was able to scrape together seventeen operational Panthers and two Befehlspanzer and until 10 February was used in the attempts to break through to the units encircled in Elblag - formerly Elbing.

Between 14 and 25 February the remaining tanks were engaged in the defence of Konitz in West Prussia - now Chojnice - where Major Brandes was killed on the first day of battle. At the conclusion of the fighting the regiment possessed just eight Panthers and two of these were not operational, one requiring long term repair. The division retreated into Pomerania and by 9 March was in the area of Koczala - formerly Flötenstein - south-east of Koszalin. In a report compiled by the OKH Generalquartiermeister - the Quartermaster General of the Army's High Command - dated 15 March 1945, Panzer-Regiment 25 is recorded as having nine Panthers on hand of which five were combat ready while less than a week later, on 20 March, the total had dropped to three with just two of those being serviceable.

From the middle Of March until the end of the month the division fought for the high ground around Gotenhafen - present day Gdynia - and had control of the suburbs before being withdrawn to Oxhöfter Kämpfe - today Oksywska. Here, on the night of 4 April 1945, the last tanks of Panzer-Regiment 25 - possibly three in number - were destroyed by their crews. On 15 April an OKH order directed that the division be reformed and reorganised according to the Panzer-Division 45 guidelines which had been issued to the Army on 25 March 1945, however no tanks were ever delivered before the end of the war. The men fought on as infantry until 3 May 1945 when the survivors surrendered to the Americans at Banzkow south of Schwerin.

This concludes Volume 1. In the second instalment we will examine the remaining Panther battalions of the numbered Panzer regiments of the Army and cover the units equipped with Jagdpanther tank destroyers on the Eastern Front.



Below: A Pzkw V Panther ausf A of I.Abtteilung, Panzer-Regiment 26 photographed in Latvia during the late summer of 1944. Just visible is the battalion's unit insignia of a black, snarling Panther painted on the turret side in front of the vehicle's number. This tank is also shown and discussed in the illustration section on page 16. At left: Oberleutnant Emil Rossman, who served as a company commander with the first battalion of Panzer-Regiment 26, photographed some time after 23 March 1945 when he was awarded the rare Panzerkampfabzeichen acknowledging over one hundred armoured engagements. Oberleutnant Rossman received the Ritterkreuz on 23 October 1944 and his story is dealt with in the next volume.





All three images on this page shown Pzkw V ausf G tanks of 2.Kompanie, Panzer-Regiment 27 from 19.Panzer-Division outside Warsaw in August 1944. The regiment took part in the fighting for the Manuszew bridgehead and Studzianki and by late September the Panthers of I.Abteilung, were fighting in the suburbs of the Polish capital particularly Zoliborz north of the former Eisenbahn-Brücke and Alexander Citadel and Mokotow, almost in the centre of the city and scene of some of the heaviest fighting. Although covered with a heavy coat of dust it is possible to discern some of the wide bands of colour with which many of the tanks of the battalion were camouflaged. Other photographs show that some vehicles were painted in elaborate dazzle-type patterns although it appears that some were not camouflaged at all and one example is shown on page 13 of the illustration section. The battalion famously lost two of its Panthers, at least one from 4.Kompanie, which were given new markings and used against their former owners by the Polish Home Army.

Below, at far right: The Warsaw Shield which was intended to be presented to Wehrmacht and auxiliary personnel who had taken part in the battle to suppress the uprising from 1 August to 4 October 1944. Although an air raid destroyed all the manufacturing equipment and finished shields and none were ever awarded, it is of course possible that some survived, and many examples are in fact sold today as authentic - the shield shown here however is a replica. To qualify for the award a man must have been engaged in at least seven days of combat, to have performed an act of bravery, to have been wounded or, if serving in a non-combat role, to have been present in the combat zone for twenty-eight days.





ZIMMERIT - CLOSE-UP DEFENCE



The *Haft Hohlladung* anti-tank grenade, developed for the infantry and in use from late 1942, had been so successful that the Germans considered its adoption by the Allied armies to be only a matter of time. In theory these grenades were attached to one of the more vulnerable surfaces of an enemy tank - for instance the rear hull or tracks - where they would be held in place by small but powerful magnets until the charge was detonated. To protect their own tanks from a similar weapon the Army decided after numerous experiments that the solution lay in altering the texture of the vehicle's smooth metal plates, limiting the hold of the magnets to such an extent that the whole device would be rendered useless. The product chosen to achieve the desired texture was a thick, cement-like substance based for the most part on Barium Sulphate and Polyvinyl Acetate - the familiar white PVA glue - with an ochre pigment and Zinc Sulphide. The latter would have reacted with the Barium Sulphate to produce a white colour further lightening the pigment and as a binding agent, ordinary sawdust was added. Developed by the *Chemische Werke Zimmer AG* of Berlin the paste was referred to by its commercial name of *Zimmerit* - often spelled as *Zimmerit* - and was to be applied to all the vertical and sloped surfaces of tanks and assault guns, including the hull sides behind the wheels, before the vehicles left the assembly plants. Moving parts, such as hinges, and detachable items - for example tools - were not to be coated as the paste would in any case be quickly worn away. Similarly, *Zimmerit* was not to be applied to either hull or turret *Schürzen* although this order was frequently ignored. The paste was applied in two coats and each coat needed to be left to cure for four hours after which it was heat-treated with a blowtorch and fashioned into a pattern of ridges. It was these ridges which worked against the magnets, the paste itself having no inherent anti-magnetic properties.

The application of *Zimmerit* on Panther tanks began in September 1943 and as just thirty-seven Panther *ausf D* vehicles left the factories before production was halted in that same month it is unlikely that many, if any, received a coat at the assembly plants. As the great majority of Panther *ausf A* models were manufactured between September 1943 and July 1944, almost all would have been coated with *Zimmerit* during the assembly phase and with Panther *ausf G* production beginning in March 1944 - the first tanks reaching front line units in April - as many as 1,600 production vehicles could have been coated in *Zimmerit* before 9 September 1944 when the practice ceased. The various tools used to create the pattern of lines and ridges could - in most instances - identify the manufacturer although it should be borne in mind that exceptions exist to every rule. The *Zimmerit* coating applied to Panthers produced by MAN was typically made up of short vertical strokes applied with a roller, giving an orderly and consistent appearance, broken up by longer vertical and horizontal lines forming a grid of about 10 centimetres square. These longer lines could sometimes be diagonals, particularly on mudguards and stowage bins but also on the turret sides. On Panther *ausf G* tanks this pattern was rigidly adhered to with different vehicles displaying the same number of lines on turret sides, hull fronts and other surfaces. Another similar pattern was used, employing a slightly larger roller which left a thicker coat of *Zimmerit* and necessitated a grid of about 15 centimetres square. That this pattern does not seem to have been applied to surfaces such as mudguards may suggest that it was a later version. Photographic evidence suggests that *Zimmerit* was not applied to the commander's cupola on MAN vehicles. The Panther *ausf A* models produced by MAN featured a flat, rather smooth application broken up by deeply scored vertical and horizontal lines which formed a grid. When the firm switched to Panther *ausf G* production in July 1944 the pattern changed to horizontal strokes applied with a trowel - in some accounts referred to as a ladder pattern - over which a grid approximately 10 centimetres square was applied. As a general rule *Zimmerit* was not applied to the mudguards and even the stowage bins were left untreated on some vehicles. Although rare, there are instances of this pattern being extended to the commander's cupola. The Daimler-Benz pattern exhibited a rather flat application which was afterwards roughened with short diagonal strokes and photographs show that the roughened *Zimmerit* was sometimes applied to the commander's cupola. The surface was then broken up by vertical and horizontal lines, again forming a grid, although the grid pattern did not extend to the cupola. The size of the grid varied and could be quite roughly applied, the lines often straying off course. There is some evidence that this pattern was adopted solely to distinguish Daimler-Benz vehicles from those produced by the company's main rival, MAN. With the exception of the initial rough application this pattern was very similar to that seen on Panther *ausf A* vehicles produced by MAN. The pattern used by Demag was made up of horizontal strokes applied with a trowel - similar to the later MAN ladder pattern - separated by deep vertical lines. Some vehicles also featured horizontal lines which then formed a grid and this has led to the Demag patterns being incorrectly assumed to be a version of the MAN *Zimmerit*.

There has been considerable argument over whether units in the field applied *Zimmerit* to their armoured vehicles and indeed many photographs exist of tanks coated in patterns which do not conform to those mentioned above. These patterns are usually characterised by a rough surface, suggesting a hurried application. Considering just how complicated the process of covering a complete vehicle was, with long waiting periods between each step culminating in the use of a blow torch with what was essentially a flammable compound and the quantities required - a single Panther needed 160 Kilograms of paste - it seems likely that older tanks and assault guns received their coating of *Zimmerit* when they were withdrawn from the front for repairs at larger workshops far in the rear. The photographs above show examples of three of the most commonly encountered patterns of *Zimmerit* application: 1) MAN production which was typified by short vertical strokes broken up by longer vertical and horizontal lines forming a grid. 2) The style of application used by MANH was similar to the MAN version with the initial short strokes applied horizontally. 3) The Daimler-Benz pattern exhibited a rather rough, flat application which was then broken up by vertical and horizontal lines, again forming a grid.

Photographed near Wischau - modern day Vyskov in Czechoslovakia - after the battles of late April 1945, this Pzkw V Panther ausf G, although damaged, retains one of the rectangular mounting brackets on the side of the gun mantlet used to hold part of the Bild Wandler, or Biwa, infra red sighting equipment. Although this tank is often associated with Panzer-Regiment 27 of 19. Panzer-Division there is no record of the regiment being allocated or receiving any of these specially adapted vehicles. Although the men of the Panther battalion's 4. Kompanie were transferred to Fallinbostel in Germany to train on Biwa Panthers they were returned to the division by 19 April 1945 without any tanks. Further, this is very obviously a 2. Kompanie vehicle. Another possible candidate is Panzer-Regiment 39 of 17. Panzer-Division which sent a company of its first battalion to Fallinbostel on 1 April 1945 to be trained with the Biwa Panthers. However, the documents are unclear on when the company returned to its parent formation and again, there is no official record of any Biwa Panthers being allocated to the regiment. It is entirely possible of course that this tank was taken over from another unit and not sent from Germany, in which case the first battalion of Panzer-Regiment Feldherrnhalle, which also took part in the defence of Vyskov, could be considered a possibility - albeit remote. We can confidently rule out Panzergrenadier-Division Brandenburg, which although engaged in the fighting here, reported that there were no Panthers available at the time of the battle.



NOTES

1). Orders were issued for Panzergrenadier divisions at the same time though they need not concern us here other than to say that Panzergrenadier-Division Grossdeutschland was to be organised as for a Panzer division. The organisational changes are explained in detail on pages 8 and 9.

2). During the winter of 1943/44 several tank battalions and regiments were detached from their parent formations and used to form ad-hoc battle groups. Some are mentioned in our narrative but in general need not concern us as our study really begins in June 1944.

3). The decision to disband Panzer-Brigade 110, which had been serving as a security unit in the Hungarian capital under Wehrmacht-Kommandantur Budapest, was made as early as September. In that same month the brigade had a full complement of thirty-six Pzkw V tanks on hand in addition to eleven PzIV/70(V) tank destroyers and four Flakpanzer IV Möbelwagen.

4). The renaming of 13. Panzer-Division has been the subject of some controversy over the years with some authors claiming that it is in fact a myth. The official order was not promulgated until 23 March 1945 which does unambiguously state that the division would henceforth be known as Panzer-Division Feldherrnhalle 2. However the adoption of the name in late 1944 is certainly open to question. A mention in the Wehrmachtbericht of 20 December 1944 read in part: "The Panzergrenadierdivision Feldherrnhalle under the leadership of Generalmajor Pape and the 13. Panzerdivision under the leadership of Generalmajor Schmidhuber... distinguished themselves by showing exceptional bravery and attacking spirit, in hard fought defensive battles in the vicinity of Budapest". It seems that there was some reluctance to use the title until the division was formally renamed Panzer-Division Feldherrnhalle 2 on 23 March 1945.

5). These units should not to be confused with Panzergrenadier-Division Feldherrnhalle which was almost completely destroyed in the fighting for Minsk in July 1944, reformed in September and then renamed on 27 November as Panzer-Division Feldherrnhalle. The title Feldherrnhalle was intended to identify units which had been raised from members of the Sturmabteilung or SA and several units would bear the name including two Panzer brigades numbered 106 and 110 and schwere-Panzer-Abteilung 503.

6). The entry for this delivery is marked Biwa (for Bildwandler) and these tanks were fitted with complete sets of Infrared night fighting equipment. They were never used in their intended role however as it was feared that the technology would fall into the hands of the rapidly advancing Russians and all the Infrared sets were removed and returned to Germany.

7). The staff company contained three Pzkw IV ausf J tanks, the first and second companies were equipped with fourteen Jadgpanzer IV L/48 each and the fourth company had fourteen Pzkw IV ausf J. On 1 November a fifth company with seventeen PzIV/70(A) was added.

8). The ten Panthers mentioned were received on 5 March 1945 and within five days seven vehicles were in need of serious repair. There is no record of any further delivery. The fifth, sixth and seventh companies of II. Abteilung were equipped with a mix of Pzkw IV tanks and PzIV/70(V) tank destroyers.

9). On 4 March 1945 the battalion received just eight Panthers and the shortfall of seven may have been those tanks delivered on the last day of February and not included in the 1 March report. The division also reported that forty-six Jadgpanzer IV L/48 tank destroyers were on hand confirming that the suggestion the battalion had been completely equipped with Panthers by 25 December 1944 is incorrect.

10). The company was made up of two Befehlspanzer of the Stabskompanie, with the first to fourth companies contributing three, four, one and two Panthers respectively.

11). While we can find no official record of the division being subordinated to II. SS-Panzerkorps the information regarding 6. Panzer-Division's service in Vienna is taken from the account of Helmut Ritgen who served with the tank regiment earlier in the war and is the author of several authoritative works.

12). The battalion Stab had at least one Panther and possibly two, the first to fourth companies had fifteen, thirteen - or possibly fifteen, twelve and thirteen tanks on hand respectively. The staff company also possessed two Befehlspanzer IV command tanks and three Wirbelwind anti-aircraft vehicles.



Obergefreiter, Heer Panzer Battalion. Eastern Front, Winter 1944.

When the two-piece winter suit was first issued during late 1942 and early 1943 priority for this new uniform was given to the Panzertruppen as the standard winter clothing greatcoats and surcoats were not practical for climbing onto and moving within the confines of a tank. Fully kitted out for the winter months, this Obergefreiter wears the splinter camouflage M43 reversible winter suit. This was an improvement on the earlier M42 winter suit now having reinforced elbow and knee patches, moreover the trousers also had an additional windproof double closure flap. In the field this heavy padded clothing was difficult to clean and dry, the white side - especially the trousers - were easily soiled in combat conditions making it lose its effectiveness for snow camouflage. Regulations were implemented that the white side was only worn when absolutely necessary and in many cases the Panzer Soldat would reverse the jacket to its white side leaving the winter suit trousers on the camouflage side. Under his winter suit he wears his black wool Heer Panzer uniform and an M42 high turtle neck sweater. He also wears a pair of woollen gloves. His headwear is the black wool M42 Panzer field cap which gave better protection in the winter, when necessary having a double flap that could be turned down as far as the neck and buttoned at the chin. His winter footwear is a pair of second type felt boots. He is depicted loading shells onto his Panzer and holds a 7,5cm Panzergranat 39 armour-piercing shell. Below: Fabric printed with the so-called Splinter pattern camouflage used by the Army displayed quite a wide variation in the shades of the colours used as evidenced by the samples shown below.



At right: A Pzkw V Panther ausf G of an as yet unknown unit, said to have been photographed in East Prussia during late 1944. Although the formation to which this tank was attached

has never been satisfactorily identified, and we are unable to offer any new information, the use of large red numbers, outlined in white and painted centrally on the turret side and repeated on the hull rear, is almost identical to the system used by Panzer-Regiment 6 throughout much of 1944, the darker colour changing to black later in the year. Below: The cover page of the Panther-Fibel an instruction manual produced for Panther crews which presented technical and operational information in a humorous manner.



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